

# Ecology Addendum

**Land to West of White Horse Business Park, Trowbridge**

**Relating to planning application 20/03641/OUT**

|               |                       |
|---------------|-----------------------|
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## **1.0 Introduction**

- 1.1.1 Castlewood Properties Limited submitted a planning application (20/03641/OUT) for a residential led development on land to the west of White Horse Business Park, Trowbridge.
- 1.1.2 The ecology consultation response (04/11/20, attached in Appendix 1 for ease of reference), which was a combined response for this application and one to the south ((20/05805/OUT), requested further information/clarification on a range of issues.
- 1.1.3 Since that time the applicant has undertaken an update habitat survey and consulted with Wiltshire Ecology (including submission of Core Bat Habitat Report, Biodiversity Net Gain Assessment and draft Green Infrastructure Plan). This Ecology Addendum pulls together and updates that information for final submission, covering Core Bat Habitat (sections 2-4), Biodiversity Net Gain (section 5), Green Infrastructure Plan (section 6) and approach to Great Crested Newts (section 7).

## **2.0 Core Bat Habitat**

### **2.1 Introduction**

- 2.1.1 The ecology consultation response included a request for bat data presentation to be reformatted and areas of Core Bat Habitat (as defined by the Trowbridge Bat Mitigation Strategy) to be defined.
- 2.1.2 Section 2 of this document presents re-formatted bat data; section 3 presents analysis of early/late records and section 4 identifies existing Core Bat Habitat for both applications.
- 2.1.3 The only differences to the original document shared with Wiltshire is:
- through consultation it was agreed that the central north-south hedgerow within the Castlewood application red line is considered to be "Core Bat Habitat"; and
  - that the extent of proposed Core Bat Habitat for the Castlewood application is now just shown on the Green Infrastructure Parameters Plan.

### **2.2 Collated Records for Myotis, GHS & LHS**

#### **2.3 Myotis**

- 2.3.1 Tables 2.1-2.4 below present total number of passes and average passes per night recorded by the automated detectors for both sites for Myotis species of bat. Locations of the automated detectors are shown in Figure 1.

**Table 2.1: Total Myotis Passes By Month - Castlewood**

| Location     | Jul        | Aug        | Sep        | Oct         | Apr       | May        | Jun        | Total       |
|--------------|------------|------------|------------|-------------|-----------|------------|------------|-------------|
| C1           | 2          | 194        | 3          | 17          | 2         | 1          | 2          | 221         |
| C2           | 9          | 10         | 0          | 14          | 1         | 1          | 14         | 49          |
| C3           | 0          | 37         | 52         | 16          | 13        | 43         | 16         | 177         |
| C4           | 334        | 13         | 271        | 796         | 12        | 26         | 520        | 1972        |
| C5           | 49         | 16         | 18         | 45          | 6         | 39         | 11         | 184         |
| C6           | 13         | 597        | 14         | 917         | 2         | 176        | 5          | 1724        |
| <b>Total</b> | <b>407</b> | <b>867</b> | <b>358</b> | <b>1805</b> | <b>36</b> | <b>286</b> | <b>568</b> | <b>4327</b> |

**Table 2.2: Total Myotis Passes By Month - Vistry**

| Location     | April     | May        | June       | July       | August     | September   | October    | Total       |
|--------------|-----------|------------|------------|------------|------------|-------------|------------|-------------|
| V1           | 2         | 50         | 19         | 14         | 10         | 52          | 74         | 221         |
| V2           | 3         | 98         | 160        | 20         | 66         | 67          | 87         | 501         |
| V3           | 5         | 28         | 145        | 65         | 342        | 673         | 158        | 1416        |
| V4           | 6         | 9          | 10         | 11         | 27         | 18          | 18         | 99          |
| V5           | 0         | 9          | 8          | 11         | 452        | 200         | 572        | 1252        |
| V6           | N/A       | 16         | 4          | 5          | 45         | 24          | 20         | 114         |
| <b>Total</b> | <b>16</b> | <b>210</b> | <b>346</b> | <b>126</b> | <b>942</b> | <b>1034</b> | <b>929</b> | <b>3603</b> |

**Table 2.3: Average Nightly Myotis Passes By Month – Castlewood & Vistry**

| Location | April | May   | June  | July  | August | September | October | Total |
|----------|-------|-------|-------|-------|--------|-----------|---------|-------|
| V1       | 0.29  | 4.55  | 2.38  | 1.40  | 1.11   | 5.20      | 9.25    | 3.51  |
| V2       | 0.43  | 14.00 | 20.00 | 2.00  | 7.33   | 6.70      | 14.50   | 8.79  |
| V3       | 0.71  | 2.55  | 18.13 | 6.50  | 38.00  | 67.30     | 22.57   | 22.84 |
| V4       | 0.86  | 0.82  | 1.25  | 1.10  | 3.00   | 1.80      | 2.25    | 1.57  |
| V5       | 0.00  | 0.82  | 1.00  | 1.10  | 50.22  | 22.22     | 81.71   | 20.52 |
| V6       | N/A   | 1.45  | 0.50  | 0.50  | 5.00   | 4.80      | 4.00    | 2.38  |
| C1       | 0.22  | 0.17  | 0.29  | 0.25  | 32.33  | 0.43      | 1.89    | 4.25  |
| C2       | 0.11  | 0.20  | 2.00  | 1.13  | 1.67   | 0.00      | 1.56    | 0.96  |
| C3       | 1.44  | 7.17  | 2.29  | 0.00  | 6.17   | 7.43      | 8.00    | 3.93  |
| C4       | 1.33  | 4.33  | 74.29 | 41.75 | 2.17   | 38.71     | 88.44   | 37.92 |
| C5       | 0.67  | 6.50  | 1.83  | 6.13  | 2.67   | 2.57      | 5.00    | 3.61  |
| C6       | 0.22  | 29.33 | 0.71  | 1.63  | 99.50  | 2.00      | 101.89  | 33.15 |

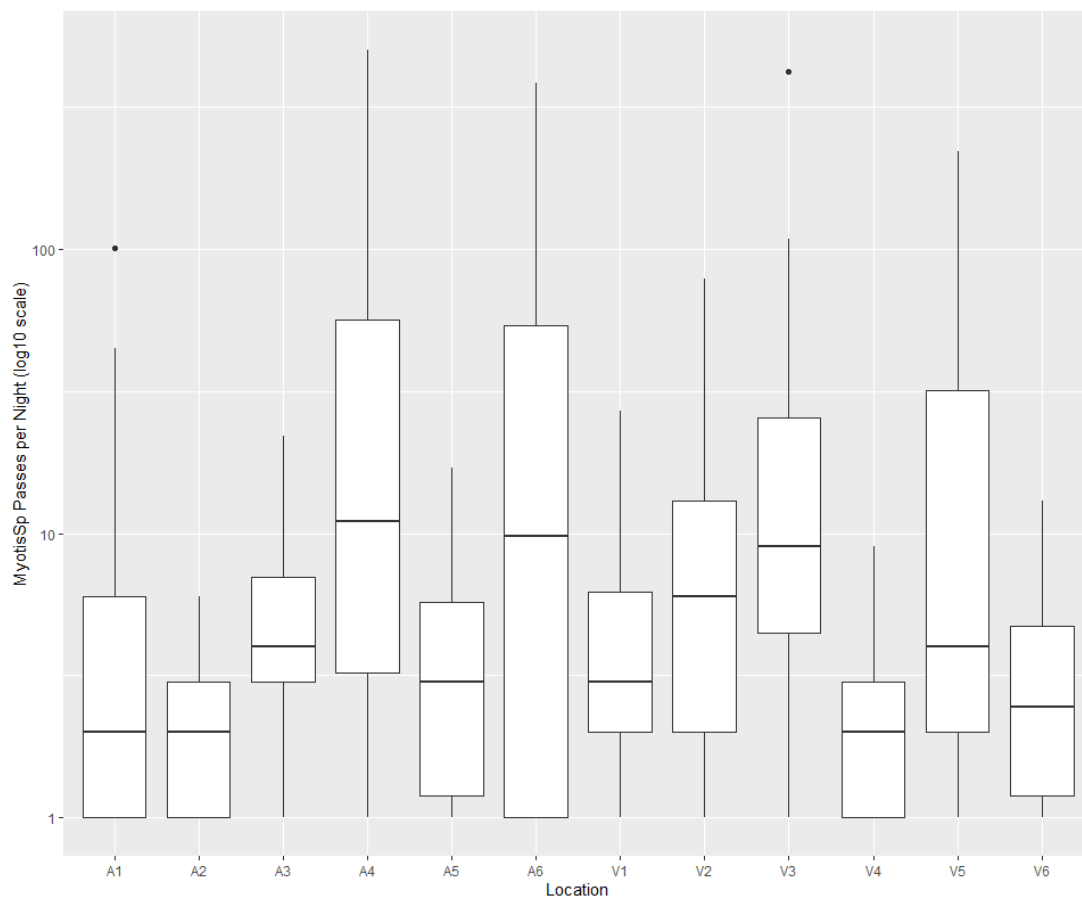
\* Note the average nightly passes were used to produce the figures within the submitted Ecological Impact Assessments.

**Table 2.4: Average Nightly Myotis Passes By Month – Castlewood & Vistry (Sorted High-Low)**

| Location | April | May   | June  | July  | August | September | October | Total |
|----------|-------|-------|-------|-------|--------|-----------|---------|-------|
| C4       | 1.33  | 4.33  | 74.29 | 41.75 | 2.17   | 38.71     | 88.44   | 37.92 |
| C6       | 0.22  | 29.33 | 0.71  | 1.63  | 99.50  | 2.00      | 101.89  | 33.15 |
| V3       | 0.71  | 2.55  | 18.13 | 6.50  | 38.00  | 67.30     | 22.57   | 22.84 |
| V5       | 0.00  | 0.82  | 1.00  | 1.10  | 50.22  | 22.22     | 81.71   | 20.52 |
| V2       | 0.43  | 14.00 | 20.00 | 2.00  | 7.33   | 6.70      | 14.50   | 8.79  |
| C1       | 0.22  | 0.17  | 0.29  | 0.25  | 32.33  | 0.43      | 1.89    | 4.25  |
| C3       | 1.44  | 7.17  | 2.29  | 0.00  | 6.17   | 7.43      | 8.00    | 3.93  |
| C5       | 0.67  | 6.50  | 1.83  | 6.13  | 2.67   | 2.57      | 5.00    | 3.61  |
| V1       | 0.29  | 4.55  | 2.38  | 1.40  | 1.11   | 5.20      | 9.25    | 3.51  |
| V6       | N/A   | 1.45  | 0.50  | 0.50  | 5.00   | 4.80      | 4.00    | 2.38  |
| V4       | 0.86  | 0.82  | 1.25  | 1.10  | 3.00   | 1.80      | 2.25    | 1.57  |
| C2       | 0.11  | 0.20  | 2.00  | 1.13  | 1.67   | 0.00      | 1.56    | 0.96  |

2.3.2 Box plot 2.1 below shows the Myotis species activity recorded across both sites.

**Box Plot 2.1: Myotis Activity by automated detector location**



2.3.3 Table 2.4 and Box Plot 2.1 suggest the greatest levels of Myotis species activity were recorded at C4, C6 & V3.

## 2.4 Greater Horseshoe Bat

2.4.1 Tables 2.5-2.8 below present total number of passes and average passes per night recorded by the automated detectors for both sites for Greater Horseshoe Bat (GHS).

**Table 2.5: Total GHS Passes By Month - Castlewood**

| Location     | Jul      | Aug       | Sep       | Oct      | Apr       | May       | Jun        | Total      |
|--------------|----------|-----------|-----------|----------|-----------|-----------|------------|------------|
| C1           | 0        | 4         | 0         | 0        | 1         | 1         | 9          | 15         |
| C2           | 3        | 5         | 2         | 1        | 3         | 1         | 12         | 27         |
| C3           | 0        | 5         | 6         | 1        | 22        | 4         | 13         | 51         |
| C4           | 2        | 3         | 8         | 3        | 1         | 3         | 58         | 78         |
| C5           | 1        | 5         | 0         | 0        | 3         | 2         | 16         | 27         |
| C6           | 1        | 13        | 7         | 1        | 1         | 3         | 3          | 29         |
| <b>Total</b> | <b>7</b> | <b>35</b> | <b>23</b> | <b>6</b> | <b>31</b> | <b>14</b> | <b>111</b> | <b>227</b> |

**Table 2.6: Total GHS Passes By Month - Vistry**

| Locations    | April    | May       | June      | July      | August    | September | October     | Total       |
|--------------|----------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|
| V1           | 3        | 19        | 13        | 8         | 4         | 1         | 63          | 111         |
| V2           | 0        | 3         | 9         | 2         | 3         | 2         | 4           | 23          |
| V3           | 3        | 10        | 19        | 28        | 9         | 7         | 0           | 76          |
| V4           | 0        | 6         | 5         | 3         | 4         | 0         | 0           | 18          |
| V5           | 2        | 3         | 4         | 7         | 4         | 1         | 4217        | 4238        |
| V6           | N/A      | 2         | 4         | 5         | 6         | 2         | 0           | 19          |
| <b>Total</b> | <b>8</b> | <b>43</b> | <b>54</b> | <b>53</b> | <b>30</b> | <b>13</b> | <b>4284</b> | <b>4485</b> |

**Table 2.7: Average Nightly GHS Passes By Month – Castlewood & Vistry**

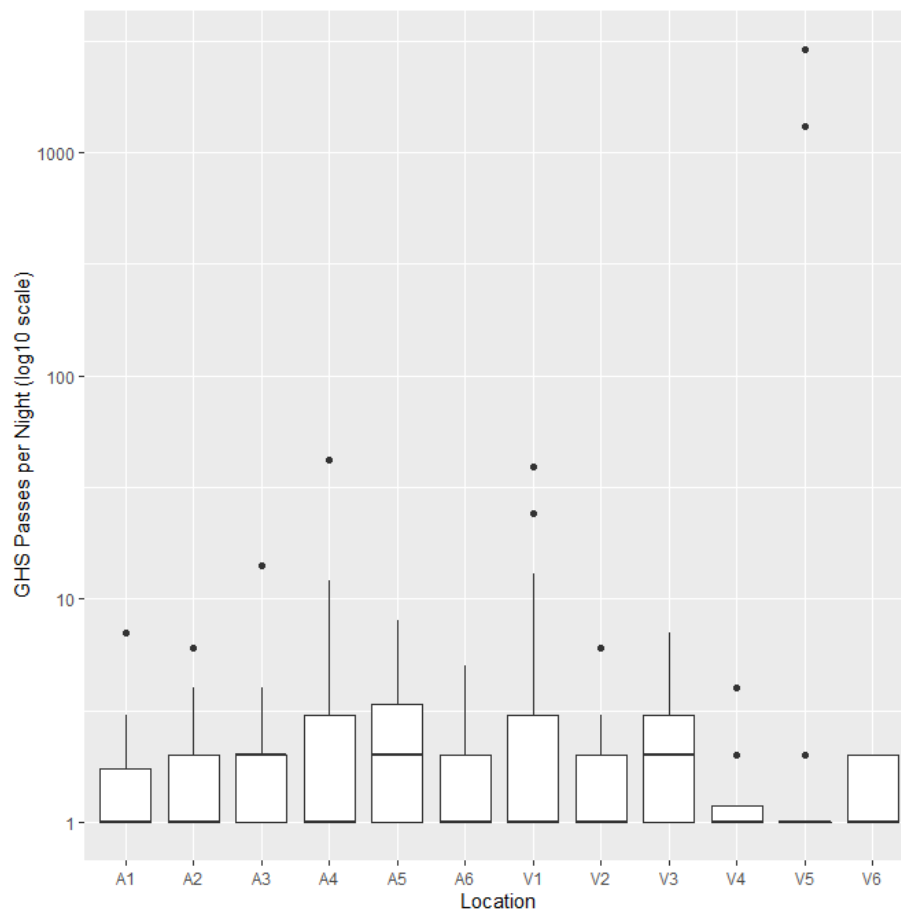
| Location | April | May  | June | July | August | September | October | Total |
|----------|-------|------|------|------|--------|-----------|---------|-------|
| V1       | 0.43  | 1.73 | 1.63 | 0.80 | 0.44   | 0.10      | 7.88    | 1.76  |
| V2       | 0.00  | 0.43 | 1.13 | 0.20 | 0.33   | 0.20      | 0.67    | 0.40  |
| V3       | 0.43  | 0.91 | 2.38 | 2.80 | 1.00   | 0.70      | 0.00    | 1.23  |
| V4       | 0.00  | 0.55 | 0.63 | 0.30 | 0.44   | 0.00      | 0.00    | 0.29  |
| V5       | 0.29  | 0.27 | 0.50 | 0.70 | 0.44   | 0.11      | 602.43  | 69.48 |
| V6       | N/A   | 0.18 | 0.50 | 0.50 | 0.67   | 0.40      | 0.00    | 0.40  |
| C1       | 0.11  | 0.17 | 1.29 | 0.00 | 0.67   | 0.00      | 0.00    | 0.29  |
| C2       | 0.33  | 0.20 | 1.71 | 0.38 | 0.83   | 0.29      | 0.11    | 0.53  |
| C3       | 2.44  | 0.67 | 1.86 | 0.00 | 0.83   | 0.86      | 0.50    | 1.13  |
| C4       | 0.11  | 0.50 | 8.29 | 0.25 | 0.50   | 1.14      | 0.33    | 1.50  |
| C5       | 0.33  | 0.33 | 2.67 | 0.13 | 0.83   | 0.00      | 0.00    | 0.53  |
| C6       | 0.11  | 0.50 | 0.43 | 0.13 | 2.17   | 1.00      | 0.11    | 0.56  |

**Table 2.8: Average Nightly GHS Passes By Month – Castlewood & Vistry (Sorted High-Low)**

| Location | April | May  | June | July | August | September | October | Total |
|----------|-------|------|------|------|--------|-----------|---------|-------|
| V5       | 0.29  | 0.27 | 0.50 | 0.70 | 0.44   | 0.11      | 602.43  | 69.48 |
| V1       | 0.43  | 1.73 | 1.63 | 0.80 | 0.44   | 0.10      | 7.88    | 1.76  |
| C4       | 0.11  | 0.50 | 8.29 | 0.25 | 0.50   | 1.14      | 0.33    | 1.50  |
| V3       | 0.43  | 0.91 | 2.38 | 2.80 | 1.00   | 0.70      | 0.00    | 1.23  |
| C3       | 2.44  | 0.67 | 1.86 | 0.00 | 0.83   | 0.86      | 0.50    | 1.13  |
| C6       | 0.11  | 0.50 | 0.43 | 0.13 | 2.17   | 1.00      | 0.11    | 0.56  |
| C2       | 0.33  | 0.20 | 1.71 | 0.38 | 0.83   | 0.29      | 0.11    | 0.53  |
| C5       | 0.33  | 0.33 | 2.67 | 0.13 | 0.83   | 0.00      | 0.00    | 0.53  |
| V2       | 0.00  | 0.43 | 1.13 | 0.20 | 0.33   | 0.20      | 0.67    | 0.40  |
| V6       | N/A   | 0.18 | 0.50 | 0.50 | 0.67   | 0.40      | 0.00    | 0.40  |
| C1       | 0.11  | 0.17 | 1.29 | 0.00 | 0.67   | 0.00      | 0.00    | 0.29  |
| V4       | 0.00  | 0.55 | 0.63 | 0.30 | 0.44   | 0.00      | 0.00    | 0.29  |

2.4.2 Box plot 2.2 below shows the GHS species activity recorded across both sites.

**Box Plot 2.2: GHS Activity by automated detector location**



2.4.3 Table 2.8 and Box Plot 2.2 suggest the greatest levels of GHS activity were recorded at C5, V3 & C3, with the high levels of activity in October @ V5, and relatively high levels @ V1 also in October, being notable.

## 2.5 Lesser Horseshoe Bat

2.5.1 Tables 2.9-2.12 below present total number of passes and average passes per night recorded by the automated detectors for both sites for Lesser Horseshoe Bat (LHS).

**Table 2.9: Total LHS Passes By Month - Castlewood**

| Location     | Jul       | Aug       | Sep       | Oct       | Apr       | May       | Jun      | Total      |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|------------|
| C1           | 0         | 0         | 0         | 0         | 0         | 1         | 0        | 1          |
| C2           | 0         | 0         | 0         | 0         | 0         | 0         | 0        | 0          |
| C3           | 0         | 2         | 4         | 0         | 5         | 16        | 2        | 29         |
| C4           | 0         | 0         | 0         | 10        | 0         | 0         | 3        | 13         |
| C5           | 15        | 0         | 3         | 2         | 4         | 1         | 0        | 25         |
| C6           | 0         | 20        | 10        | 0         | 8         | 0         | 0        | 38         |
| <b>Total</b> | <b>15</b> | <b>22</b> | <b>17</b> | <b>12</b> | <b>17</b> | <b>18</b> | <b>5</b> | <b>106</b> |

**Table 2.10: Total LHS Passes By Month - Vistry**

| Locations    | April     | May       | June      | July      | August    | September | October   | Total      |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| V1           | 6         | 53        | 9         | 1         | 3         | 2         | 6         | 80         |
| V2           | 2         | 30        | 2         | 7         | 4         | 0         | 2         | 47         |
| V3           | 0         | 2         | 0         | 3         | 2         | 5         | 9         | 21         |
| V4           | 1         | 5         | 0         | 0         | 0         | 2         | 3         | 11         |
| V5           | 1         | 4         | 0         | 11        | 1         | 0         | 0         | 17         |
| V6           | N/A       | 0         | 1         | 0         | 2         | 3         | 1         | 7          |
| <b>Total</b> | <b>10</b> | <b>94</b> | <b>12</b> | <b>22</b> | <b>12</b> | <b>12</b> | <b>21</b> | <b>183</b> |

**Table 2.11: Average Nightly GHS Passes By Month – Castlewood & Vistry**

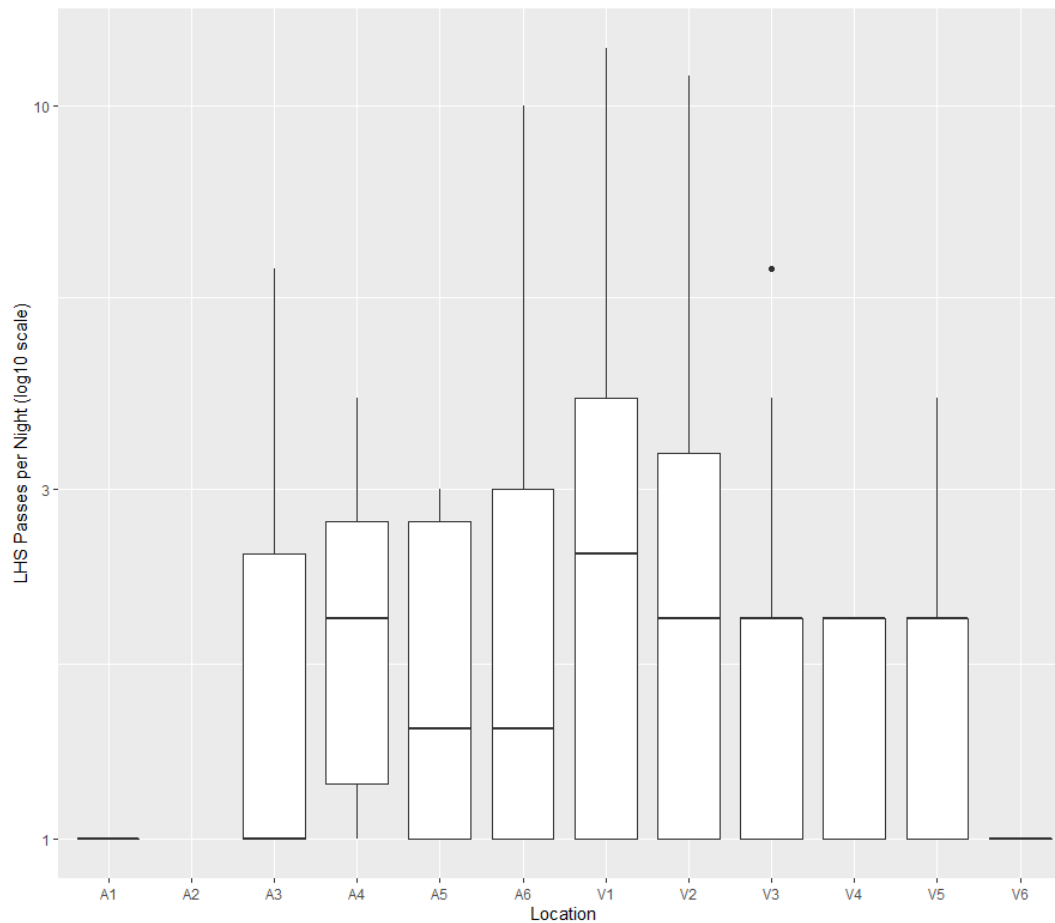
| Location | April | May  | June | July | August | September | October | Total |
|----------|-------|------|------|------|--------|-----------|---------|-------|
| V1       | 0.86  | 4.82 | 1.13 | 0.10 | 0.33   | 0.20      | 0.75    | 1.27  |
| V2       | 0.29  | 4.29 | 0.25 | 0.70 | 0.44   | 0.00      | 0.33    | 0.82  |
| V3       | 0.00  | 0.18 | 0.00 | 0.30 | 0.22   | 0.50      | 1.29    | 0.34  |
| V4       | 0.14  | 0.45 | 0.00 | 0.00 | 0.00   | 0.20      | 0.38    | 0.17  |
| V5       | 0.14  | 0.36 | 0.00 | 1.10 | 0.11   | 0.00      | 0.00    | 0.28  |
| V6       | N/A   | 0.00 | 0.13 | 0.00 | 0.22   | 0.60      | 0.20    | 0.15  |
| C1       | 0.00  | 0.17 | 0.00 | 0.00 | 0.00   | 0.00      | 0.00    | 0.02  |
| C2       | 0.00  | 0.00 | 0.00 | 0.00 | 0.00   | 0.00      | 0.00    | 0.00  |
| C3       | 0.56  | 2.67 | 0.29 | 0.00 | 0.33   | 0.57      | 0.00    | 0.64  |
| C4       | 0.00  | 0.00 | 0.43 | 0.00 | 0.00   | 0.00      | 1.11    | 0.25  |
| C5       | 0.44  | 0.17 | 0.00 | 1.88 | 0.00   | 0.43      | 0.22    | 0.49  |
| C6       | 0.89  | 0.00 | 0.00 | 0.00 | 3.33   | 1.43      | 0.00    | 0.73  |

**Table 2.12: Average Nightly LHS Passes By Month – Castlewood & Vistry (Sorted High-Low)**

| Location | April | May  | June | July | August | September | October | Total |
|----------|-------|------|------|------|--------|-----------|---------|-------|
| V1       | 0.86  | 4.82 | 1.13 | 0.10 | 0.33   | 0.20      | 0.75    | 1.27  |
| V2       | 0.29  | 4.29 | 0.25 | 0.70 | 0.44   | 0.00      | 0.33    | 0.82  |
| C6       | 0.89  | 0.00 | 0.00 | 0.00 | 3.33   | 1.43      | 0.00    | 0.73  |
| C3       | 0.56  | 2.67 | 0.29 | 0.00 | 0.33   | 0.57      | 0.00    | 0.64  |
| C5       | 0.44  | 0.17 | 0.00 | 1.88 | 0.00   | 0.43      | 0.22    | 0.49  |
| V3       | 0.00  | 0.18 | 0.00 | 0.30 | 0.22   | 0.50      | 1.29    | 0.34  |
| V5       | 0.14  | 0.36 | 0.00 | 1.10 | 0.11   | 0.00      | 0.00    | 0.28  |
| C4       | 0.00  | 0.00 | 0.43 | 0.00 | 0.00   | 0.00      | 1.11    | 0.25  |
| V4       | 0.14  | 0.45 | 0.00 | 0.00 | 0.00   | 0.20      | 0.38    | 0.17  |
| V6       | N/A   | 0.00 | 0.13 | 0.00 | 0.22   | 0.60      | 0.20    | 0.15  |
| C1       | 0.00  | 0.17 | 0.00 | 0.00 | 0.00   | 0.00      | 0.00    | 0.02  |
| C2       | 0.00  | 0.00 | 0.00 | 0.00 | 0.00   | 0.00      | 0.00    | 0.00  |

2.5.2 Box plot 2.3 below shows the LHS species activity recorded across both sites.

**Box Plot 2.3: LHS Activity by automated detector location**



2.5.3 Table 2.12 and Box Plot 2.3 suggest the greatest levels of LHS activity was recorded at V1 with locations V2, V3, V4, V5 & C4 being the next most active.

### 3.0 Analysis of Early/Late Records for Myotis, GHS & LHS

3.1.1 All the automated data for Myotis, GHS and LHS was split into 15 different periods, with the times of those periods shown in Table 3.1 below.

**Table 3.1: Time Periods**

| Time Code | Time Period          | Time Code | Time Period            |
|-----------|----------------------|-----------|------------------------|
| 1         | Before sunrise       | 9         | 120-101 before sunrise |
| 2         | 0-20 after sunset    | 10        | 100-81 before sunrise  |
| 3         | 21-40 after sunset   | 11        | 80-61 before sunrise   |
| 4         | 41-60 after sunset   | 12        | 60-41 before sunrise   |
| 5         | 61-80 after sunset   | 13        | 40-21 before sunrise   |
| 6         | 81-100 after sunset  | 14        | 0-20 before sunrise    |
| 7         | 101-120 after sunset | 15        | After sunrise          |
| 8         | Middle of the Night  |           |                        |

3.1.2 Tables 3.2 & 3.3 show the times the Myotis species calls were recorded by the automated detectors. They broadly show that the earlier/later records (within 40 minutes of sunset/sunrise) were recorded on the Vistry site.

3.1.3 When the records were checked for these time periods, the first/last record on any given night tends to be from locations near the south of each site. This suggests that Myotis species are entering/leaving the site from the south i.e. coming from/going back to a roost somewhere to the south, potentially within one of the Trowbridge Bat Woodlands.

**Table 3.2: Myotis Records by Time Period - Castlewood**

| Location     | 0        | 1 | 2         | 3          | 4          | 5          | 6          | 7           | 8          | 9          | 10         | 11         | 12         | 13       | 14 | 15 | Total       |
|--------------|----------|---|-----------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|----------|----|----|-------------|
| C1           | 1        |   | 1         | 4          | 7          | 3          | 5          | 174         | 1          | 3          | 3          | 19         |            |          |    |    | 221         |
| C2           |          |   |           | 2          | 3          | 1          | 2          | 39          |            | 1          | 1          |            |            |          |    |    | 49          |
| C3           |          |   |           | 19         | 12         | 11         | 11         | 99          | 4          | 5          | 10         | 5          |            | 1        |    |    | 177         |
| C4           |          |   | 8         | 68         | 42         | 65         | 100        | 1013        | 128        | 212        | 276        | 57         | 3          |          |    |    | 1972        |
| C5           |          |   | 8         | 29         | 4          | 2          | 11         | 99          | 7          | 7          | 7          | 10         | 1          |          |    |    | 185         |
| C6           |          |   | 21        | 59         | 34         | 57         | 41         | 1041        | 63         | 89         | 103        | 140        | 132        | 3        |    |    | 1783        |
| <b>Total</b> | <b>1</b> |   | <b>38</b> | <b>181</b> | <b>102</b> | <b>139</b> | <b>170</b> | <b>2465</b> | <b>203</b> | <b>317</b> | <b>400</b> | <b>231</b> | <b>136</b> | <b>4</b> |    |    | <b>4327</b> |

**Table 3.3: Myotis Records by Time Period - Vistry**

| Location     | 0 | 1        | 2          | 3          | 4          | 5          | 6          | 7           | 8         | 9         | 10        | 11        | 12        | 13       | 14 | 15 | Total       |
|--------------|---|----------|------------|------------|------------|------------|------------|-------------|-----------|-----------|-----------|-----------|-----------|----------|----|----|-------------|
| V1           |   |          | 3          | 13         | 11         | 6          | 6          | 133         | 8         | 12        | 12        | 8         | 1         | 1        |    |    | 214         |
| V2           |   | 1        | 37         | 191        | 33         | 15         | 6          | 164         | 10        | 11        | 20        | 6         | 5         | 1        |    |    | 500         |
| V3           |   | 3        | 22         | 37         | 33         | 56         | 83         | 1033        | 18        | 43        | 24        | 32        | 10        |          |    |    | 1394        |
| V4           |   | 1        | 11         | 17         | 3          | 5          | 7          | 34          | 2         | 2         | 8         | 5         | 1         | 1        |    |    | 97          |
| V5           |   |          | 86         | 153        | 119        | 80         | 96         | 583         | 10        | 2         | 11        | 19        | 5         |          |    |    | 1164        |
| V6           |   |          | 6          | 24         | 6          | 8          | 7          | 47          | 3         | 6         | 2         | 3         | 1         | 1        |    |    | 114         |
| <b>Total</b> |   | <b>5</b> | <b>165</b> | <b>435</b> | <b>205</b> | <b>170</b> | <b>205</b> | <b>1994</b> | <b>51</b> | <b>76</b> | <b>77</b> | <b>73</b> | <b>23</b> | <b>4</b> |    |    | <b>3603</b> |

3.1.4 Tables 3.4 & 3.5 show the times the GHS calls were recorded by the automated detectors. They suggest there are no significant GHS roosts within the area.

**Table 3.4: GHS Records by Time Period - Castlewood**

| Location     | 0 | 1 | 2 | 3         | 4         | 5        | 6        | 7          | 8         | 9         | 10       | 11 | 12 | 13 | 14 | 15 | Total      |
|--------------|---|---|---|-----------|-----------|----------|----------|------------|-----------|-----------|----------|----|----|----|----|----|------------|
| C1           |   |   |   | 4         |           |          |          | 7          | 2         | 1         | 1        |    |    |    |    |    | 15         |
| C2           |   |   |   | 1         | 1         | 1        |          | 18         |           | 4         | 2        |    |    |    |    |    | 27         |
| C3           |   |   |   | 3         | 5         | 4        | 2        | 31         | 1         | 3         | 2        |    |    |    |    |    | 51         |
| C4           |   |   |   | 2         | 3         | 1        |          | 34         | 33        | 5         |          |    |    |    |    |    | 78         |
| C5           |   |   |   | 1         | 5         | 1        |          | 14         | 2         | 4         |          |    |    |    |    |    | 27         |
| C6           |   |   |   | 4         | 6         | 1        | 1        | 13         |           | 4         |          |    |    |    |    |    | 29         |
| <b>Total</b> |   |   |   | <b>15</b> | <b>20</b> | <b>8</b> | <b>3</b> | <b>117</b> | <b>38</b> | <b>21</b> | <b>5</b> |    |    |    |    |    | <b>227</b> |

**Table 3.5: GHS Records by Time Period – Vistry**

| Location     | 0 | 1 | 2 | 3        | 4         | 5        | 6        | 7           | 8         | 9         | 10        | 11 | 12 | 13 | 14 | 15 | Total       |
|--------------|---|---|---|----------|-----------|----------|----------|-------------|-----------|-----------|-----------|----|----|----|----|----|-------------|
| V1           |   |   |   | 1        | 4         | 1        | 1        | 88          | 2         | 5         | 9         |    |    |    |    |    | 111         |
| V2           |   |   |   |          | 1         |          | 2        | 20          |           |           |           |    |    |    |    |    | 23          |
| V3           |   |   |   |          | 10        | 1        | 2        | 49          | 9         | 4         | 1         |    |    |    |    |    | 76          |
| V4           |   |   |   | 1        | 1         |          | 1        | 11          | 2         | 1         |           |    |    |    |    |    | 17          |
| V5           |   |   |   | 1        | 7         |          |          | 4237        |           |           | 1         |    |    |    |    |    | 4246        |
| V6           |   |   |   | 1        | 2         | 1        |          | 10          | 2         | 1         | 1         |    |    |    |    |    | 18          |
| <b>Total</b> |   |   |   | <b>4</b> | <b>25</b> | <b>3</b> | <b>6</b> | <b>4415</b> | <b>15</b> | <b>11</b> | <b>12</b> |    |    |    |    |    | <b>4491</b> |

3.1.5 Tables 3.6 & 3.7 show the times the LHS calls were recorded by the automated detectors. They suggest there are no significant LHS roosts within the area.

**Table 3.6: LHS Records by Time Period - Castlewood**

| Location     | 0 | 1 | 2         | 3         | 4        | 5         | 6        | 7         | 8        | 9        | 10       | 11       | 12 | 13 | 14 | 15 | Total      |
|--------------|---|---|-----------|-----------|----------|-----------|----------|-----------|----------|----------|----------|----------|----|----|----|----|------------|
| C1           |   |   |           |           |          |           |          | 1         |          |          |          |          |    |    |    |    | 1          |
| C2           |   |   |           |           |          |           |          |           |          |          |          |          |    |    |    |    |            |
| C3           |   |   |           | 1         | 1        | 1         | 1        | 15        | 2        | 7        | 1        |          |    |    |    |    | 29         |
| C4           |   |   |           | 2         |          |           |          | 10        |          |          |          | 1        |    |    |    |    | 13         |
| C5           |   |   |           | 3         | 2        | 8         | 5        | 7         |          |          |          |          |    |    |    |    | 25         |
| C6           |   |   | 15        | 6         | 2        | 2         | 1        | 12        |          |          |          |          |    |    |    |    | 38         |
| <b>Total</b> |   |   | <b>15</b> | <b>12</b> | <b>5</b> | <b>11</b> | <b>7</b> | <b>45</b> | <b>2</b> | <b>7</b> | <b>1</b> | <b>1</b> |    |    |    |    | <b>106</b> |

**Table 3.7: LHS Records by Time Period – Vistry**

| Location     | 0 | 1 | 2        | 3        | 4        | 5        | 6        | 7         | 8         | 9         | 10        | 11       | 12       | 13 | 14 | 15 | Total      |
|--------------|---|---|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------|----|----|----|------------|
| V1           |   |   |          | 3        | 2        | 2        | 2        | 33        | 13        | 14        | 8         | 1        | 2        |    |    |    | 80         |
| V2           |   |   | 3        | 1        | 1        |          | 1        | 21        | 6         | 4         | 5         | 5        |          |    |    |    | 47         |
| V3           |   |   | 1        | 2        | 2        |          |          | 14        | 1         |           |           |          |          |    |    |    | 20         |
| V4           |   |   |          | 2        | 1        |          | 1        | 5         | 1         |           |           |          | 1        |    |    |    | 11         |
| V5           |   |   | 3        |          | 1        | 4        |          | 6         | 1         | 1         |           |          | 1        |    |    |    | 17         |
| V6           |   |   |          | 1        | 1        |          | 1        | 3         |           |           |           |          | 1        |    |    |    | 7          |
| <b>Total</b> |   |   | <b>7</b> | <b>9</b> | <b>8</b> | <b>6</b> | <b>5</b> | <b>82</b> | <b>22</b> | <b>19</b> | <b>13</b> | <b>6</b> | <b>5</b> |    |    |    | <b>182</b> |

## 4.0 Core Bat Habitat

### 4.1.1 Taking the above into account, alongside:

- manual survey records, which only recorded limited activity of Horseshoe and Myotis species, but where predominantly recorded along the eastern and western boundaries and along Little Common lane (where there is either woodland or tree cover present);
- the woodland habitat preferences of the three species, against the fairly uniform species-poor grassland present across the majority of the survey area;
- that there were only limited cattle (<5) present on the Castlewood land during the surveys and that the land is no longer grazed;
- that a Bechstein's Bat from the Trowbridge Bat Woodlands has been radio tracked along the woodland edge of the White Horse Business Park;
- the higher number of Myotis records at location C4 was in part down to it being at a hedgerow junction and under a mature Oak tree; and
- habitat connectivity to the wider landscape existing,

4.1.2 Core Bat Habitat has been identified as mapped in Figure 1. The Core Bat Habitat is considered to extend 7.5m from hedgerow/woodland boundary features, that being the woodland of the White Horse Business Park and hedgerows along the southern and western boundaries.

## 5.0 Biodiversity Net Gain Position

### 5.1 Introduction

5.1.1 The ecology consultation response included a request for greater detail regarding Biodiversity Net Gain (BNG) calculations to be presented. This relates to the criteria set out in the Trowbridge Bat Mitigation Strategy (TBMS) SPD (Feb 2020) which requests *"100% mitigation is provided for all greenfield habitat loss within the allocation site boundary as demonstrated by use of the Biodiversity Metric 2.0"*.

5.1.2 The only difference to the original Castlewood BNG Position document is:

- the Land Use Plan with POS strategy has been updated to reflect the GI Plan;
- the area of formal recreation space has increased from 0.15ha to 0.17ha; and
- an explanation that whilst the Land Use Plan only shows 0.28ha of SUDs, the metric uses a figure of 0.50ha to allow for up to 0.22ha of swales in addition to basins.

## 5.2 Update Habitat Survey

- 5.2.1 A habitat survey of the Site was undertaken on the 10<sup>th</sup> September 2021 by an experienced botanist. This was to update results of previous habitat surveys undertaken in 2018 and March 2021, including updating the condition assessment of the habitats in accordance with the Defra Biodiversity Metric 3.0 Condition Assessments Sheets<sup>1</sup> which were released in summer 2021.
- 5.2.2 In the September survey species lists for 1m<sup>2</sup> quadrats were recorded to assist with the assessment of habitat quality for grassland habitats. The only other habitat present on Site was Bramble dominated scrub. This habitat is automatically assigned "poor" condition in the metric.
- 5.2.3 In summary the fields within the Castlewood application boundaries remain classified as "other neutral grassland", but three fields now are assessed as poor condition and two fields in moderate condition. Species lists and field reference numbers for the surveys are shown in Appendix 2 based on the updated survey data.

## 5.3 BNG Rationale

- 5.3.1 Given the proposals would result in limited loss of hedgerows and have the ability to comfortably propose sufficient new hedgerows to achieve hedgerows gains as determined by the metric, this assessment is focused on area-based site habitat.
- 5.3.2 Whilst the planning application proposed approximately 2.9ha net developable land, Castlewood are no longer proposing development within the northern field (where a care home element was previously proposed). This change reduces the net developable land to 2.56ha.
- 5.3.3 In accordance with current guidance the net developable land has been presented as a 70 / 30% split of developed land/sealed surface to vegetated garden of poor condition.
- 5.3.4 As shown on the Land Use Plan (Appendix 3) outside the development footprint the metric allows for creation of:
- Formal recreation space (which would consist of amenity grassland) 0.17ha;
  - Play space/nature play 0.01ha;
  - SUDs 0.28ha;

---

<sup>1</sup> Natural England Joint Publication JP039. The biodiversity metric 3.0: auditing and accounting for biodiversity Condition assessment sheets (Excel format) ISBN 978-1-78354-782-1. Downloaded on 17 August 2021 from [The Biodiversity Metric 3.0 - JP039 \(nepubprod.appspot.com\)](https://nepubprod.appspot.com/)

- o The metric is populated with a figure of 0.50ha to allow for up to 0.22ha of swales in addition to basins.
- Formal paths 0.10ha;
  - o The metric also allows for 0.10ha of informal mown grass paths;
- Highways 0.08ha; and
- Pumping station 0.01ha.

5.3.5 Within the proposed development area the calculations have included for street trees that would be outside of private gardens (59 No. small trees). Within the recreation space the calculations have included for trees (12 No. medium trees) within the amenity grassland. This equates to 0.0714ha on the Urban tree helper on the main menu. As such a figure of 0.07ha has been entered for Urban Tree in the Site Habitat Creation tab of the metric.

5.3.6 To maximise BNG scoring the metric has been populated based on the remaining grassland being retained and enhanced. As discussed with and accepted by the county ecologist, if habitats that were more beneficial to the woodland bat species were then proposed (e.g. woodland, orchard, scrub), but which scored more poorly on the metric, the score based on grassland retention/enhancement would be accepted.

5.3.7 Whilst the proposals include for permanent water/ponds within the SUDs, the area of ponds proposed is not yet known. As such on a precautionary basis they have not been included within the metric calculations.

5.3.8 It is proposed that the retained grassland would be enhanced to good condition through hay meadow management (summer cut and arisings removed) to increase the currently low % cover of wildflowers.

## 5.4 BNG Results

5.4.1 As set out in Appendix 4 based on the update surveys, the changes in Metric 3.0 scoring and updated proposals, the proposals would now achieve a positive 2.61% change in Habitat Units.

5.4.2 The Metric does flag that the trading rules are not satisfied. This is a result of there being a minor loss in the score within the Other Neutral Grassland category. However given the intention to lose further grassland through the provision of woodland, scrub and orchard habitats which would be more beneficial for the rare woodland bat species associated with the Trowbridge woodlands, it is considered this flag is acceptable.

## 6.0 Green Infrastructure

6.1.1 The constraints imposed by the Core Bat Habitat and the requirement to achieve 100% mitigation (at least 0% BNG) in accordance with the TBMS has led the proposals and has resulted in the shape and extent of the land uses committed to on the Green Infrastructure Parameters Plan (NPA 11020 301 P01).

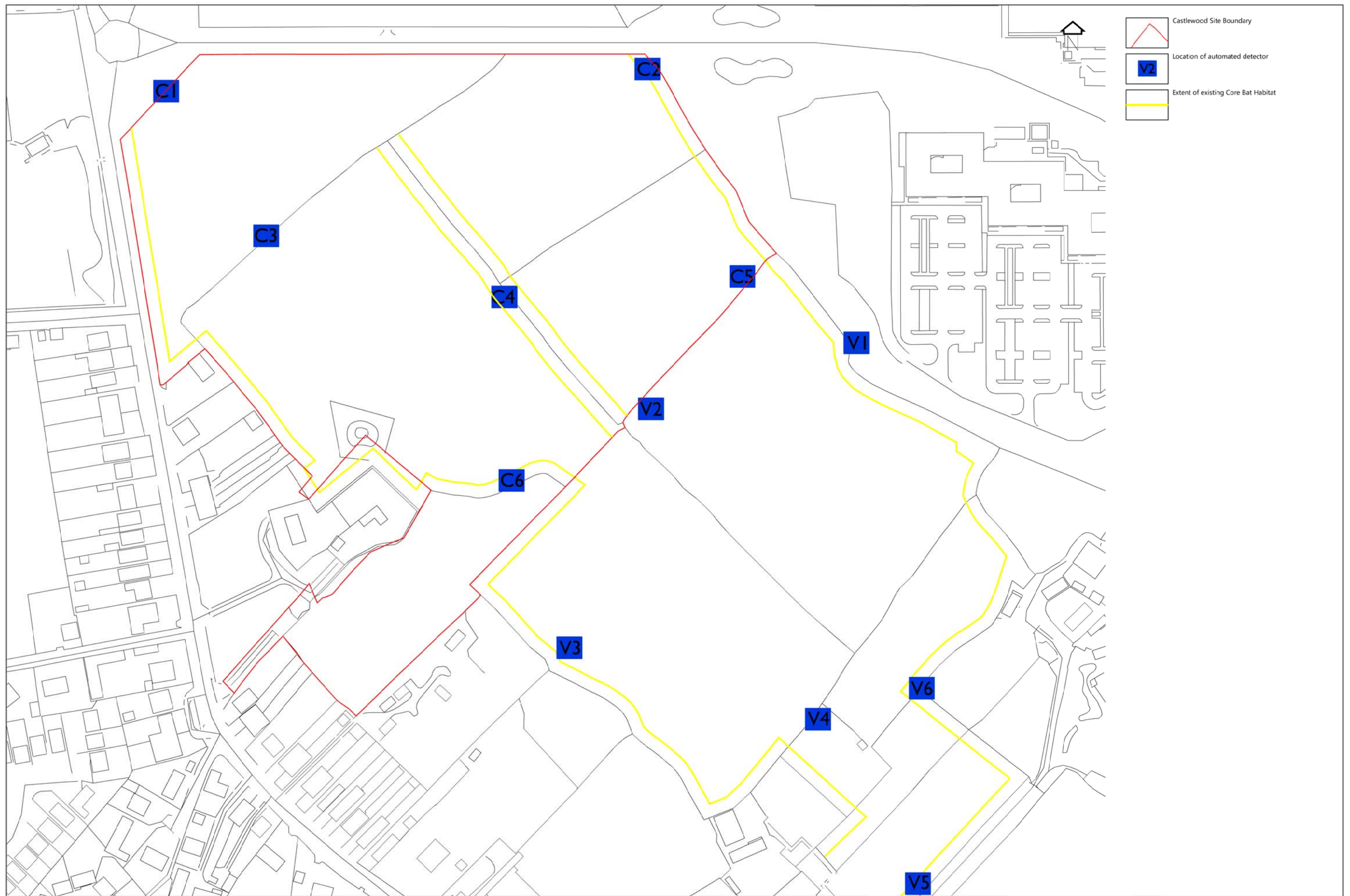
6.1.2 The GI Plan includes:

- A coherent network of enhanced habitat linked to the wider landscape;
- A minimum:
  - o 40m buffer along the western edge of the Site;
  - o 22.5m buffer along the eastern edge of the Site;
  - o 15m green corridor along central north-south hedgerow;
- Double hedgerow/greenway arrangement along the central north-south and south-eastern hedgerows;
  - o Which allows a 4m offset from edge of existing hedge and then a 2m wide native species-rich hedgerow
- Restrictions on light spill, including a bespoke category for the greenway arrangement.
  - o Note that where areas of Core Bat Habitat abut external highways, they would not meet the lighting criteria set out within the TBMS.

## 7.0 Great Crested Newts

7.1.1 Given the significant constraints relating to bats, including BNG/100% habitat mitigation requirement, it is proposed that this scheme would join the GCN District Level Licence to avoid the need to apply for project level GCN mitigation licence.

7.1.2 However the proposals would still include mitigation measures for GCN, including pond creation, habitat link across the access road, as well as sensitive methods of construction to minimise likelihood of killing and injuring GCN.





Site boundary

Existing hedgerow retained

Existing tree or tree group to be retained.

Hedgerow to be removed to facilitate access and circulation

Extent of existing on-site Core Bat Habitat

Proposed extent of on-site Core Bat Habitat

**Dark habitat zone:**  
<0.2 Lux on the horizontal plane and <0.4 Lux on the vertical plane (measured at 1.5m and 4m). Note: Hedgerows, trees and/or woodland (in combination with temporary fencing if required) will be selectively planted to minimise light spill and/or glare as necessary.

**Built development lighting buffer zone:**  
Minimum 15m wide from edge of dark habitat zone. Max. 1 Lux at edge near residential development (on horizontal plane) reducing to <0.2 Lux within 15 linear metres

**As Dark Habitat Zone above, but no associated 15m buffer, so some limited potential for lighting from private gardens to encroach.**  
Minimum of 4m wide.

**Wider Green Infrastructure**  
To be planted/managed in advance of construction where away from construction works.  
Existing grassland to be retained and enhanced through hay meadow management, but to also include:

- tussocky grassland management;
- network of pathways;
- SUDs;
- Broad-leaved native woodland planting;
- Broad-leaved native parkland tree planting (e.g. Oaks);
- Scrub planting;
- Orchard planting; and
- key planting identified below.

Proposed 2m wide native species-rich hedgerow. To be managed at no lower than 2m high.

Broad-leaved native woodland planting to strengthen bat habitat connectivity between business park woodland and Elm Grove to existing east-west hedgerow

Wooded corridor (at least 20m wide) to provide strong north-south bat commuting corridor along western edge of Site.

Key links to wider bat habitat

Proposed residential development

Proposed highway

Proposed location of pumping station (to be outside Core Bat Habitat)

Indicative SUDs layout

Indicative location of permanent water body to provide suitable breeding habitat for Great Crested Newts.

Indicative area of formal POS and Play Area

Localised access road width restriction to minimise the hedgerow break (max 9.5m gap). Trees planted either side of break to minimise gap by canopy spread as far as H&S allows.

Newt crossing detail

**NICHOLAS PEARSON ASSOCIATES**  
ENVIRONMENTAL PLANNERS • LANDSCAPE ARCHITECTS • ECOLOGISTS

Client: **Castletown Properties Ventures Ltd**

Project: **Land at White Horse Business Park, Trowbridge**

Drawing: **Green Infrastructure Parameters Plan**

Drawing No: NPA 11020 301

Date: 28/01/2022

Scale: 1:1000@A2

Rev: P01

Drawn: DH

Checked:

Approved:

Status: PLANNING

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Dwg Ref: N:\Projects\11020 CPV\Work\Ecology\Green Infrastructure\_Parameters Plan.dwg

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Plotted on 1/28/2022 by David Harvey. Plotscale: 1:1, Paper Size ISO full bleed A2 (420.00 x 594.00 MM). Plot style: NPA\_COL.ctb

## Appendix 1: Wiltshire Ecology Consultation Response

## Wiltshire Council Planning Consultation Response

### ECOLOGY

**Officer name:** Louisa Kilgallen MSc, MCIEEM, CEnv

**Date:** 04/11/20

|                 |                                               |
|-----------------|-----------------------------------------------|
| Application No: | 20/05805/OUT and 20/03641/OUT                 |
| Proposal:       | 100 dwellings / 100 dwellings and a care home |
| Site Address:   | Land next to White Horse Business Park        |
| Case Officer:   | David Cox                                     |

### Recommendations:

|   |                                               |
|---|-----------------------------------------------|
|   | No Comment                                    |
|   | Support                                       |
|   | No objection                                  |
|   | Condition (no objection subject to condition) |
| x | Objection - further information required      |
|   | Objection in principle                        |
| x | HRA required                                  |

### Matters Considered:

### Appropriate Assessment

These two developments will be screened into appropriate assessment in relation to the Bath and Bradford on Avon Bats SAC. I've provided joint comments for both applications in relation to the TBMS compliance criteria below. The HRA for the WHSAP concluded that compliance with the TBMS would be sufficient to demonstrate applications would not lead to adverse effects alone and in combination with other plans and projects. Non-compliance would lead to uncertainty, not only in relation to these specific applications but in relation to the remaining Trowbridge sites in the plan.

### Compliance against TBMS criteria

|   | TMBS criteria                                                                                                                                                                                                                                                                                                                                                               | Details provided for Application                                                                                                                                                                                                                                                                                                                                                                                         |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>Surveys should be completed:</p> <ul style="list-style-type: none"> <li>In accordance with Council pre-application advice if provided</li> <li>In accordance with BCT Good Practice Guidelines and the specifications described in Section 6 (p25-28) of the TBMS</li> <li>Could mating sites have been overlooked (survey April and October for male roosts)</li> </ul> | <p>Criterion not met.</p> <p>While surveys for both applications meet the criteria, interpretation of data is inadequate to support either application.</p> <p>Box plots and pie charts are useful, but data also needs to be tabulated for GHS, LHS and <i>Myotis</i> sp i.e. collate numbers of bat passes for each species at each station by month. See applications 20/07751/FUL and 18/10035/OUT for examples.</p> |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                                                                                                                                                                                                                                                                                                                                                                                | <p>Interpretation of data needs to integrate findings of habitat survey, bat transects and static surveys for all three landholdings at this allocation and make reference to timings of bat passes to determine:</p> <ol style="list-style-type: none"> <li>1. Existing key flight lines for SAC species across the entire allocation, considering where bats may be entering and leaving the site and the most likely routes for autumn migration/swarming by Bechstein's and horseshoes.</li> <li>2. The likelihood of horseshoe roosts occurring nearby off site and the routes onto the site from these.</li> <li>3. The likelihood of Bechstein's roosts occurring on and nearby off site both currently and in the future as existing trees mature.</li> <li>4. The likelihood of each species using the site for foraging, identifying the most important habitats at different times of year taking full account of the use of long grass and grazed pasture by greater horseshoe bats in particular.</li> <li>5. How the site relates to offsite areas including Elm Grove in particular as well as other land and including potential roosts off site.</li> <li>6. For all of the above, a precautionary approach must be taken in view of the incomplete picture presented by the data set, otherwise further survey may be required.</li> </ol> <p>This information must be used to identify Core Bat Habitat as defined in the TBMS across the whole allocation. This information must demonstrably inform the whole allocation masterplan. Without this sequential approach to master planning it will not be possible to conclude the appropriate assessment favourably.</p> |
| 2 | <p>Masterplan to be provided which covers entire allocation (referenced in WHSAP housing policies) and identifies:</p> <ul style="list-style-type: none"> <li>• Core Bat Habitat features</li> <li>• That sufficient land can be set aside to achieve 100% mitigation for loss of habitat due to development footprint</li> <li>• The maximum quantum of residential units for the whole allocation</li> </ul> | <p>Criterion not met.</p> <p>The Wider Site Allocation Masterplan does not cover these three bullet points. Written confirmation that the third landowner is signed up to the masterplan is required before the appropriate assessment can be concluded.</p> <p>The use of land at the southern end of the allocation needs to be controlled through inclusion in the red or blue land associated with a planning application. This site needs to be fully integrated into the design of the allocation.</p> <p>The quantum of development at each allocation and for Trowbridge as a whole was assessed through the HRA for the WHSAP. This allocation is anticipated to provide a prime flight line for bats moving between roosting habitat and the SAC and this correlates with data emerging for Lambrook stream. This route must be preserved taking all due precautionary measures needed to compensate for lack of detail afforded by the surveys. Significant deviation from the 175 dwellings anticipated in the</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>WHSAP is unlikely to allow the HRA to be concluded favourably.</p> <p>The Council provisionally identified the key flight route that would be safeguarded for bats would be along the south western side of the allocation as this would enable bats to fly westwards without having to cross any new roads. This option must be pursued unless the data suggests bats strongly prefer other routes (which does not seem to be the case from the data).</p> <p>Little Common is likely to comprise Core Bat Habitat and therefore changes to habitat or street lighting are unlikely to be acceptable.</p>                                                                                                                            |
| 3 | <p>For outline applications, Parameters Plan (para 142) to address:</p> <ul style="list-style-type: none"> <li>• Specific site design measures/restrictions to deliver the Masterplan</li> <li>• Areas to remain undeveloped</li> <li>• Areas to form landscaping</li> </ul>                                                                                                                                                                         | <p>Criterion not met.</p> <p>Parameters plan needs to be consistent with masterplan and include distances to show that the minimum widths for core bat habitat and necessary buffers will be met.</p> <p>Broad habitat type needs to be shown on the plan.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4 | <p>Biodiversity Net Gain Calculations demonstrate 100 % mitigation has been provided for all habitat lost where the yellow zone and the application boundary overlap (NB the Biodiversity Metric Calculation excel spreadsheet should be provided). The calculation is supported by maps showing the specific areas of land identified in each row of the calculation tool for the baseline and operational phase of development.</p>                | <p>Criterion not met.</p> <p>Please provide the completed excel calculators in unlocked form.</p> <p>Please ensure each row relates to a specific habitat area shown on the parameters plan (or an outline mitigation plan).</p> <p>The habitat baseline area must match the land area within the red line boundary.</p> <p>The Metric is required to demonstrate no net loss of biodiversity value for habitats and hedgerows and must comply with the Technical Guidance and User Guide available on NE's website</p> <p>SuDs come under proposed habitat type 'urban – sustainable drainage feature'</p> <p>Strategic significance – the site is within the TBMS yellow zone (i.e. local strategy) therefore of high significance</p> |
| 5 | <p>For reserved matters and full applications, an Ecological Mitigation Plan to be submitted containing (para 143):</p> <p>(i) Scaled drawing to show</p> <ul style="list-style-type: none"> <li>• Details of replacement roosts</li> <li>• Commuting routes and foraging habitat to be retained, created and enhanced</li> <li>• Location/extent and full landscape specifications for tree and shrub planting, wildflower grassland etc</li> </ul> | <p>Not required for the current application.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|    |                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <ul style="list-style-type: none"> <li>• Location of temporary work areas</li> <li>• Limit of built development</li> </ul> (ii) Schedule of works covering removal, enhancement and creation of habitat features in relation to timing of construction works.<br>(iii) Detailed and scaled cross sections to accurately locate development and vegetation features |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 6  | The EMP proposals submitted for item 5 above are in accordance with the standards for habitat mitigation and management as described at section 8.2 and Figure 6 in the TBMS.                                                                                                                                                                                      | Not required for the current application however note that Masterplan and Parameters Plan need to demonstrate these standards can be met in the EMP submitted for reserved matters.                                                                                                                                                                                                                                                                                                                                |
| 7  | Application to demonstrate retained core bat habitat connects to the wider habitat network.                                                                                                                                                                                                                                                                        | Criterion not met.<br>Core bat habitat has yet to be defined                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 8  | Application to demonstrate core bat habitat will remain relatively undisturbed by the effects of urbanisation.                                                                                                                                                                                                                                                     | Criterion not met.<br>Core bat habitat and buffers have yet to be defined                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 9  | The potential impacts of lighting are adequately modelled and assessed with appropriate mitigation included to minimise the effects artificial lighting across the site in accordance with section 8.3.                                                                                                                                                            | Any lighting assessment submitted at this stage needs to be based on the Core Bat Habitat as identified through the HRA for the WHSAP and bat data collected for these applications. The parameters plan should demonstrate that all core bat habitat will be buffered by 15m wide dark zones reaching max 1 lux at the outer edge (see figure 6 TBMS) (no conflict with shared drives, car parks etc). Where there is doubt, a provisional lighting contour plan should be provided with the outline application. |
| 10 | An appropriate lighting monitoring regime has been provided.                                                                                                                                                                                                                                                                                                       | Not required for the current application                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 11 | Appropriate mechanisms for maintenance, monitoring and remediation of mitigation measures have been submitted covering relevant phases of development including the post construction period.                                                                                                                                                                      | Given the large amount of land which will be set aside as open space, the usual management arrangements under a management company are unlikely to be viable. Discussions are recommended with third parties including the town council, North Bradley PC, Wiltshire Wildlife Trust etc.                                                                                                                                                                                                                           |
| 12 | The applicant agrees that a financial contribution towards the Council led scheme for mitigating residual effects from loss / degradation of bat habitat will be secured by S106.                                                                                                                                                                                  | This will form an item in S106 Heads of Terms.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 13 | Is it likely that the CIL funded, Council led scheme, to offset residual effects from recreational pressure at                                                                                                                                                                                                                                                     | Criterion is met, the Council will contribute the requisite amount in Appendix 2 of the TBMS SPD (£641.48) per dwelling from CIL.                                                                                                                                                                                                                                                                                                                                                                                  |

|  |                                                                                                                 |  |
|--|-----------------------------------------------------------------------------------------------------------------|--|
|  | woodlands used by breeding bats will be able to cover impacts arising from the application under consideration? |  |
|  |                                                                                                                 |  |

## Conclusion

1. Neither application is currently adequate to allow an appropriate assessment to be concluded favourably.
2. Development quantum and layout are the two fundamental issues that must be addressed in light of bat requirements set out in the WHSAP and TBMS.
3. All land within the allocation must be included in the master plan and within the red or blue land to ensure bat mitigation can be properly secured by planning condition or legal agreement
4. Long term management responsibilities for undeveloped land need to be considered so the Council can be sure management will be viable. A management Company is unlikely to have sufficient resources to cover the land area in question.

## Other Issues:

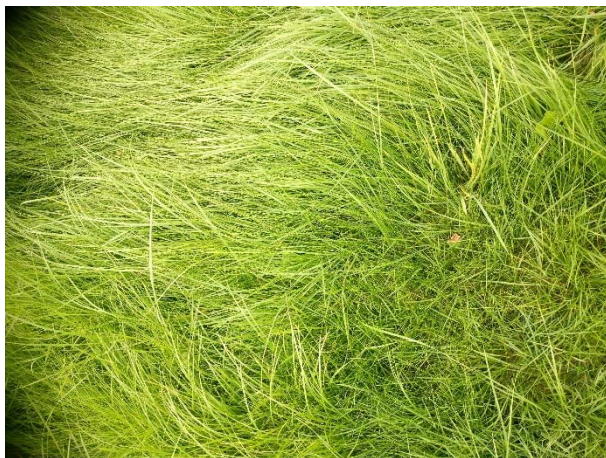
The allocation site lies in the DLL amber zone for great crested newts and based on the historical data it likely that newts will be disturbed by this development. The outline applications need to consider the most likely mitigation approach, whether this is to provide mitigation on site (details needed) or join the DLL scheme. The former is likely to be cheapest option as no ponds will be directly affected by the developments. New ponds would be a suitable focus for the ecological mitigation plan to offset the decline in ponds being experienced at the adjacent business park while also providing good bat habitat.

## Appendix 2: BNG Condition Assessment and Species Lists

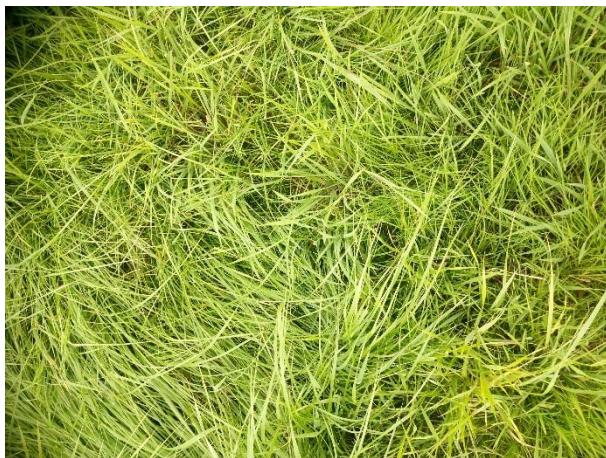


|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| Field                                                                                                                                                                                                                                                                                                                                                 | CF1                                                                                |  |                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |
| Habitat Type                                                                                                                                                                                                                                                                                                                                          | Other neutral grassland                                                            |  |                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |
| Photo                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |
| Condition Assessment                                                                                                                                                                                                                                                                                                                                  |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |
| The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.                                                           |                                                                                    |  | <b>Fail.</b><br>Wildflowers and indicator species were present with a good range of grasses and a low cover of Perennial Rye Grass, all indicating the habitat Other Neutral Grassland. However the cover of wildflowers was low and the species per m <sup>2</sup> was 7.8 which lower than specified in the UKHab definition. |    |    |    |    |
| Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.                                                                                                                            |                                                                                    |  | <b>Fail.</b><br>The was some variation in sward height but <20% of the area was below 7cm.                                                                                                                                                                                                                                      |    |    |    |    |
| Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.                                                                                                                                                                                                                                                       |                                                                                    |  | <b>Pass.</b><br>Some worn patches and sward not all dense.                                                                                                                                                                                                                                                                      |    |    |    |    |
| Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.                                                                                                                                                                                                                                                                   |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                                                                    |    |    |    |    |
| There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species <sup>1</sup> and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. |                                                                                    |  | <b>Pass.</b><br>Though some physical damage from cattle feeder.                                                                                                                                                                                                                                                                 |    |    |    |    |
| Condition Assessment Score                                                                                                                                                                                                                                                                                                                            |                                                                                    |  | Passes 3/5 criteria - <b>Moderate</b>                                                                                                                                                                                                                                                                                           |    |    |    |    |
| Species list – September 2021                                                                                                                                                                                                                                                                                                                         |                                                                                    |  | Presence/Percentage Cover (%)                                                                                                                                                                                                                                                                                                   |    |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  | Q1                                                                                                                                                                                                                                                                                                                              | Q2 | Q3 | Q4 | Q5 |
| Common Bent                                                                                                                                                                                                                                                                                                                                           | <i>Agrostis capillaris</i>                                                         |  | P                                                                                                                                                                                                                                                                                                                               | P  | P  | P  | P  |
| Red Fescue                                                                                                                                                                                                                                                                                                                                            | <i>Festuca rubra</i>                                                               |  | P                                                                                                                                                                                                                                                                                                                               | P  | P  | P  | P  |
| Tall Fescue                                                                                                                                                                                                                                                                                                                                           | <i>Schedonorus arundinaceus</i>                                                    |  | P                                                                                                                                                                                                                                                                                                                               |    |    | P  |    |

|                                           |                              |     |    |     |    |    |
|-------------------------------------------|------------------------------|-----|----|-----|----|----|
| Cock's-foot                               | <i>Dactylis glomerata</i>    | P   | P  | P   | P  | P  |
| Perennial Ryegrass                        | <i>Lolium perenne</i>        | 3   |    |     | 1  |    |
| Meadow Buttercup                          | <i>Ranunculus acris</i>      | P   | P  | P   | P  | P  |
| Common Sorrel                             | <i>Rumex acetosa</i>         |     | P  | P   | P  |    |
| Yorkshire Fog                             | <i>Holcus lanatus</i>        |     | P  | P   |    | P  |
| False Oat-grass                           | <i>Arrhenatherum elatius</i> |     | P  |     | P  | P  |
| Creeping Thistle                          | <i>Cirsium arvense</i>       |     |    | 2   |    |    |
| Creeping Buttercup                        | <i>Ranunculus repens</i>     |     |    | 1   | 1  |    |
| Creeping Bent                             | <i>Agrostis stolonifera</i>  |     |    | P   |    |    |
| Meadow Foxtail                            | <i>Alopecurus pratensis</i>  |     |    | P   |    |    |
| White Clover                              | <i>Trifolium repens</i>      |     |    |     | 1  |    |
| Tufted Hairgrass                          | <i>Deschampsia cespitosa</i> |     |    |     |    |    |
| Broadleaved Dock                          | <i>Rumex obtusifolius</i>    |     |    |     |    |    |
| Red Clover                                | <i>Trifolium pratense</i>    |     |    |     |    |    |
| Willowherb                                | <i>Epilobium</i> sp.         |     |    |     |    |    |
| Creeping Cinquefoil                       | <i>Potentilla reptans</i>    |     |    |     |    |    |
| Yarrow                                    | <i>Achillea millefolium</i>  |     |    |     |    |    |
| Spear Thistle                             | <i>Cirsium vulgare</i>       |     |    |     |    |    |
| Sweet Vernal Grass                        | <i>Anthoxanthum odoratum</i> |     |    |     |    |    |
| Cat's-ear                                 | <i>Hypochaeris radicata</i>  |     |    |     |    |    |
| Timothy                                   | <i>Phleum pratense</i>       |     |    |     |    |    |
| Bird's-foot Trefoil                       | <i>Lotus corniculatus</i>    |     |    |     |    |    |
| Grasses                                   |                              | 99  | 95 | 90  | 90 | 99 |
| Forbs                                     |                              | 1   | 5  | 4   | 4  | 1  |
| Undesirable species                       |                              | 0   | 0  | 3   | 2  | 0  |
| Bare Ground                               |                              | 0.5 | 0  | 0.5 | 2  | 0  |
| Additional Species recorded in March 2021 |                              |     |    |     |    |    |
| Pignut                                    | <i>Conopodium majus</i>      |     |    |     |    |    |
| Lesser Celandine                          | <i>Ficaria verna</i>         |     |    |     |    |    |
| Field Wood-rush                           | <i>Luzula campestris</i>     |     |    |     |    |    |
| Bulbous Buttercup                         | <i>Ranunculus bulbosus</i>   |     |    |     |    |    |
| Common Mouse-ear                          | <i>Cerastium fontanum</i>    |     |    |     |    |    |
| Common Nettle                             | <i>Urtica dioica</i>         |     |    |     |    |    |
| Curled Dock                               | <i>Rumex crispus</i>         |     |    |     |    |    |
| Cut-leaved Crane's-bill                   | <i>Geranium dissectum</i>    |     |    |     |    |    |

|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| Field                                                                                                                                                                                                                                                                                                                                                 | CF2                                                                                |  |                                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| Habitat Type                                                                                                                                                                                                                                                                                                                                          | Other neutral grassland                                                            |  |                                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| Photo                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| Condition Assessment                                                                                                                                                                                                                                                                                                                                  |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.                                                           |                                                                                    |  | <b>Fail.</b><br>A good range of grasses with a low cover of Perennial Rye Grass was present and a range of wildflowers were present, indicating the habitat was Other Neutral Grassland. However the cover of wildflowers was very low and the species per m <sup>2</sup> was 7 which is lower than specified in the UKHab definition. |    |    |    |    |
| Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.                                                                                                                            |                                                                                    |  | <b>Fail.</b>                                                                                                                                                                                                                                                                                                                           |    |    |    |    |
| Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.                                                                                                                                                                                                                                                       |                                                                                    |  | <b>Fail.</b><br>Dense sward, less than 1% bare ground so limited opportunity for germination of wildflower seeds.                                                                                                                                                                                                                      |    |    |    |    |
| Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.                                                                                                                                                                                                                                                                   |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                                                                           |    |    |    |    |
| There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species <sup>1</sup> and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                                                                           |    |    |    |    |
| Condition Assessment Score                                                                                                                                                                                                                                                                                                                            |                                                                                    |  | Passes 2/5 criteria – <b>Poor</b>                                                                                                                                                                                                                                                                                                      |    |    |    |    |
| Species list                                                                                                                                                                                                                                                                                                                                          |                                                                                    |  | Presence/Percentage Cover (%)                                                                                                                                                                                                                                                                                                          |    |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  | Q1                                                                                                                                                                                                                                                                                                                                     | Q2 | Q3 | Q4 | Q5 |
| Common Bent                                                                                                                                                                                                                                                                                                                                           | <i>Agrostis capillaris</i>                                                         |  | P                                                                                                                                                                                                                                                                                                                                      | P  | P  | P  | P  |
| Red Fescue                                                                                                                                                                                                                                                                                                                                            | <i>Festuca rubra</i>                                                               |  |                                                                                                                                                                                                                                                                                                                                        | P  | P  | P  | P  |

|                                           |                                  |     |     |     |    |    |
|-------------------------------------------|----------------------------------|-----|-----|-----|----|----|
| Tall Fescue                               | <i>Schedonorus arundinaceus</i>  |     | P   |     |    |    |
| Cock's-foot                               | <i>Dactylis glomerata</i>        | P   |     |     | P  | P  |
| Perennial Ryegrass                        | <i>Lolium perenne</i>            |     |     | 1   | 5  |    |
| Common Sorrel                             | <i>Rumex acetosa</i>             |     |     |     | P  | P  |
| Yorkshire Fog                             | <i>Holcus lanatus</i>            | P   | P   | P   | P  | P  |
| False Oat-grass                           | <i>Arrhenatherum elatius</i>     |     | P   | P   |    | P  |
| Creeping Thistle                          | <i>Cirsium arvense</i>           |     |     |     | 1  | 1  |
| Creeping Buttercup                        | <i>Ranunculus repens</i>         |     |     |     | 7  | 1  |
| Creeping Bent                             | <i>Agrostis stolonifera</i>      | P   | P   |     | P  | P  |
| Tufted Hairgrass                          | <i>Deschampsia cespitosa</i>     |     |     |     |    | P  |
| Cuckoo Flower                             | <i>Cardamine pratensis</i>       |     |     |     | P  |    |
| Creeping Cinquefoil                       | <i>Potentilla reptans</i>        |     |     |     |    | P  |
| Broad-leaved Dock                         | <i>Rumex obtusifolius</i>        |     |     |     |    |    |
| Willowherb                                | <i>Epilobium</i> sp              |     |     |     |    |    |
| Timothy                                   | <i>Phleum pratense</i>           |     |     |     |    |    |
| Meadow Vetchling                          | <i>Lathyrus pratensis</i>        |     |     |     |    |    |
| Lesser Stitchwort                         | <i>Stellaria graminea</i>        |     |     |     |    |    |
| Grasses                                   |                                  | 100 | 100 | 100 | 85 | 90 |
| Forbs                                     |                                  | 0   | 0   | 0   | 4  | 5  |
| Undesirable species                       |                                  | 0   | 0   | 0   | 8  | 2  |
| Bare Ground                               |                                  | 1   | 0   | 0.5 | 0  | 0  |
| Additional Species recorded in March 2021 |                                  |     |     |     |    |    |
| Meadow Buttercup                          | <i>Ranunculus acris</i>          |     |     |     |    |    |
| Meadow Foxtail                            | <i>Alopecurus pratensis</i>      |     |     |     |    |    |
| Soft-brome                                | <i>Bromus hordeaceus</i>         |     |     |     |    |    |
| Dandelion                                 | <i>Taraxacum officinale</i> agg. |     |     |     |    |    |
| Creeping Thistle                          | <i>Cirsium arvense</i>           |     |     |     |    |    |

|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| Field                                                                                                                                                                                                                                                                                                                                                 | CF3                                                                                |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Habitat Type                                                                                                                                                                                                                                                                                                                                          | Other neutral grassland                                                            |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Photo                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Condition Assessment                                                                                                                                                                                                                                                                                                                                  |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.                                                           |                                                                                    |  | <b>Fail.</b><br>A good range of grasses with a low cover of Perennial Rye Grass was present and a range of wildflowers were present, indicating the habitat was Other Neutral Grassland. However the cover of wildflowers was low and the species per m <sup>2</sup> was 7.8 which is lower than specified in the UKHab definition. |    |    |    |    |
| Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.                                                                                                                            |                                                                                    |  | <b>Fail.</b><br>Sward lacking short vegetation.                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.                                                                                                                                                                                                                                                       |                                                                                    |  | <b>Fail.</b><br>Dense sward, less than 1% bare ground so limited opportunity for germination of wildflower seeds.                                                                                                                                                                                                                   |    |    |    |    |
| Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.                                                                                                                                                                                                                                                                   |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species <sup>1</sup> and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. |                                                                                    |  | <b>Pass.</b><br>Marginal pass due to presence of undesirable species                                                                                                                                                                                                                                                                |    |    |    |    |
| Condition Assessment Score                                                                                                                                                                                                                                                                                                                            |                                                                                    |  | Passes 2/5 criteria - <b>Poor</b>                                                                                                                                                                                                                                                                                                   |    |    |    |    |
| Species list                                                                                                                                                                                                                                                                                                                                          |                                                                                    |  | Presence/Percentage Cover (%)                                                                                                                                                                                                                                                                                                       |    |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  | Q1                                                                                                                                                                                                                                                                                                                                  | Q2 | Q3 | Q4 | Q5 |
| Common Bent                                                                                                                                                                                                                                                                                                                                           | <i>Agrostis capillaris</i>                                                         |  | P                                                                                                                                                                                                                                                                                                                                   | P  | P  | P  | P  |
| Red Fescue                                                                                                                                                                                                                                                                                                                                            | <i>Festuca rubra</i>                                                               |  | P                                                                                                                                                                                                                                                                                                                                   |    | P  | P  | P  |

|                                           |                                  |    |    |    |     |    |
|-------------------------------------------|----------------------------------|----|----|----|-----|----|
| Tall Fescue                               | <i>Schedonorus arundinaceus</i>  |    |    |    | P   |    |
| Cock's-foot                               | <i>Dactylis glomerata</i>        | P  | P  |    | P   |    |
| Perennial Ryegrass                        | <i>Lolium perenne</i>            |    | 10 | P  | 5   |    |
| Meadow Buttercup                          | <i>Ranunculus acris</i>          |    |    | P  |     |    |
| Common Sorrel                             | <i>Rumex acetosa</i>             | P  |    | P  |     |    |
| Yorkshire Fog                             | <i>Holcus lanatus</i>            | P  | P  | P  | P   | P  |
| False Oat-grass                           | <i>Arrhenatherum elatius</i>     |    |    | P  | P   | P  |
| Creeping Buttercup                        | <i>Ranunculus repens</i>         |    | P  | 4  |     | 2  |
| Creeping Bent                             | <i>Agrostis stolonifera</i>      | P  |    |    |     | P  |
| Curled Dock                               | <i>Rumex crispus</i>             | 1  |    |    |     | 2  |
| White Clover                              | <i>Trifolium repens</i>          |    | 10 |    |     |    |
| Creeping Cinquefoil                       | <i>Potentilla reptans</i>        |    |    | P  |     |    |
| Common Vetch                              | <i>Vicia sativa</i>              |    |    | P  | P   |    |
| Meadow Fescue                             | <i>Festuca pratensis</i>         |    |    | P  |     |    |
| Cranesbill (seedling)                     | <i>Geranium sp.</i>              |    |    | P  |     |    |
| Meadow Barley                             | <i>Hordeum secalinum</i>         |    |    |    |     | P  |
| Yarrow                                    | <i>Achillea millefolium</i>      |    |    |    |     |    |
| Dandelion                                 | <i>Taraxacum officinale agg.</i> |    |    |    |     |    |
| Timothy                                   | <i>Phleum pratense</i>           |    |    |    |     |    |
| Meadow Vetchling                          | <i>Lathyrus pratensis</i>        |    |    |    |     |    |
| Grasses                                   |                                  | 90 | 85 | 95 | 100 | 95 |
| Forbs                                     |                                  | 0  | 3  | 2  | 1   | 0  |
| Undesirable species                       |                                  | 1  | 10 | 4  | 0   | 4  |
| Bare Ground                               |                                  | 0  | 0  | 1  | 1   | 0  |
| Additional Species recorded in March 2021 |                                  |    |    |    |     |    |
| Broad-leaved Dock                         | <i>Rumex obtusifolius</i>        |    |    |    |     |    |
| Bulbous Buttercup                         | <i>Ranunculus bulbosus</i>       |    |    |    |     |    |
| Creeping Thistle                          | <i>Cirsium arvense</i>           |    |    |    |     |    |
| Common Nettle                             | <i>Urtica dioica</i>             |    |    |    |     |    |
| Tufted Hairgrass                          | <i>Deschampsia cespitosa</i>     |    |    |    |     |    |
| Meadow Foxtail                            | <i>Alopecurus pratensis</i>      |    |    |    |     |    |
| Cut-leaved Crane's-bill                   | <i>Geranium dissectum</i>        |    |    |    |     |    |
| Hairy Sedge                               | <i>Carex hirta</i>               |    |    |    |     |    |
| Common Ragwort                            | <i>Senecio jacobaea</i>          |    |    |    |     |    |
| Soft Rush                                 | <i>Juncus effusus</i>            |    |    |    |     |    |

|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  |                                                                                                                                                                                                                                                                                            |    |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| Field                                                                                                                                                                                                                                                                                                                                                 | CF4                                                                                |  |                                                                                                                                                                                                                                                                                            |    |    |    |    |
| Habitat Type                                                                                                                                                                                                                                                                                                                                          | Other neutral grassland                                                            |  |                                                                                                                                                                                                                                                                                            |    |    |    |    |
| Photo                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                                            |    |    |    |    |
| Condition Assessment                                                                                                                                                                                                                                                                                                                                  |                                                                                    |  |                                                                                                                                                                                                                                                                                            |    |    |    |    |
| The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.                                                           |                                                                                    |  | <b>Fail.</b><br>A good range of grasses with a low cover of Perennial Rye Grass was present indicating the habitat was Other Neutral Grassland. However the cover of wildflowers was low and the species per m <sup>2</sup> was 7.4 which is lower than specified in the UKHab definition. |    |    |    |    |
| Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.                                                                                                                            |                                                                                    |  | <b>Fail.</b>                                                                                                                                                                                                                                                                               |    |    |    |    |
| Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.                                                                                                                                                                                                                                                       |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                               |    |    |    |    |
| Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.                                                                                                                                                                                                                                                                   |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                               |    |    |    |    |
| There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species <sup>1</sup> and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                               |    |    |    |    |
| Condition Assessment Score                                                                                                                                                                                                                                                                                                                            |                                                                                    |  | Passes 3/5 criteria - <b>Moderate</b>                                                                                                                                                                                                                                                      |    |    |    |    |
| Species list                                                                                                                                                                                                                                                                                                                                          |                                                                                    |  | Presence/Percentage Cover (%)                                                                                                                                                                                                                                                              |    |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  | Q1                                                                                                                                                                                                                                                                                         | Q2 | Q3 | Q4 | Q5 |
| Common Bent                                                                                                                                                                                                                                                                                                                                           | <i>Agrostis capillaris</i>                                                         |  | P                                                                                                                                                                                                                                                                                          | P  | P  | P  | P  |
| Red Fescue                                                                                                                                                                                                                                                                                                                                            | <i>Festuca rubra</i>                                                               |  | P                                                                                                                                                                                                                                                                                          | P  | P  | P  | P  |
| Cock's-foot                                                                                                                                                                                                                                                                                                                                           | <i>Dactylis glomerata</i>                                                          |  | P                                                                                                                                                                                                                                                                                          | P  |    | P  |    |
| Perennial Ryegrass                                                                                                                                                                                                                                                                                                                                    | <i>Lolium perenne</i>                                                              |  |                                                                                                                                                                                                                                                                                            | P  |    | 5  |    |

|                                           |                                  |     |     |    |    |    |
|-------------------------------------------|----------------------------------|-----|-----|----|----|----|
| Meadow Buttercup                          | <i>Ranunculus acris</i>          | P   | P   | P  |    |    |
| Common Sorrel                             | <i>Rumex acetosa</i>             | P   |     | P  | P  | P  |
| Yorkshire Fog                             | <i>Holcus lanatus</i>            | P   | P   | P  | P  | P  |
| False Oat-grass                           | <i>Arrhenatherum elatius</i>     |     |     |    |    | P  |
| Creeping Buttercup                        | <i>Ranunculus repens</i>         | 3   |     |    |    |    |
| White Clover                              | <i>Trifolium repens</i>          | 2   | 1   |    |    | 3  |
| Red Clover                                | <i>Trifolium pratense</i>        |     | P   |    |    |    |
| Dandelion                                 | <i>Taraxacum officinale agg.</i> |     | P   |    |    |    |
| Meadow Vetchling                          | <i>Lathyrus pratensis</i>        | P   |     |    |    |    |
| Tufted Hairgrass                          | <i>Deschampsia cespitosa</i>     |     |     |    |    |    |
| Grasses                                   |                                  | 90  | 95  | 95 | 98 | 95 |
| Forbs                                     |                                  | 2   | 2   | 5  | 2  | 2  |
| Undesirable species                       |                                  | 4   | 2   | 0  | 0  | 3  |
| Bare Ground                               |                                  | 0.5 | 0.5 | 1  | 0  | 0  |
| Additional Species recorded in March 2021 |                                  |     |     |    |    |    |
| Creeping Bent                             | <i>Agrostis stolonifera</i>      |     |     |    |    |    |
| Tall Fescue                               | <i>Schedonorus arundinaceus</i>  |     |     |    |    |    |
| Pignut                                    | <i>Conopodium majus</i>          |     |     |    |    |    |
| Meadow Vetchling                          | <i>Lathyrus pratensis</i>        |     |     |    |    |    |
| Common Mouse-ear                          | <i>Cerastium fontanum</i>        |     |     |    |    |    |
| Bulbous Buttercup                         | <i>Ranunculus bulbosus</i>       |     |     |    |    |    |
| Hairy Sedge                               | <i>Carex hirta</i>               |     |     |    |    |    |
| Meadow Foxtail                            | <i>Alopecurus pratensis</i>      |     |     |    |    |    |
| Broad-leaved Dock                         | <i>Rumex obtusifolius</i>        |     |     |    |    |    |

|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| Field                                                                                                                                                                                                                                                                                                                                                 | CF5                                                                                |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Habitat Type                                                                                                                                                                                                                                                                                                                                          | Other neutral grassland                                                            |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Photo                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| Condition Assessment                                                                                                                                                                                                                                                                                                                                  |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                     |    |    |    |    |
| The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.                                                           |                                                                                    |  | <b>Fail.</b><br>A good range of grasses with a low cover of Perennial Rye Grass was present and a range of wildflowers were present, indicating the habitat was Other Neutral Grassland. However the cover of wildflowers was low and the species per m <sup>2</sup> was 7.8 which is lower than specified in the UKHab definition. |    |    |    |    |
| Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.                                                                                                                            |                                                                                    |  | <b>Fail.</b><br>Sward height not varied and above 7cm.                                                                                                                                                                                                                                                                              |    |    |    |    |
| Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.                                                                                                                                                                                                                                                       |                                                                                    |  | <b>Fail.</b><br>Dense sward, less that 1% bare ground so limited opportunity for germination of wildflower seeds.                                                                                                                                                                                                                   |    |    |    |    |
| Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.                                                                                                                                                                                                                                                                   |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species <sup>1</sup> and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. |                                                                                    |  | <b>Pass.</b>                                                                                                                                                                                                                                                                                                                        |    |    |    |    |
| Condition Assessment Score                                                                                                                                                                                                                                                                                                                            |                                                                                    |  | Passes 2/5 criteria – <b>Poor</b>                                                                                                                                                                                                                                                                                                   |    |    |    |    |
| Species list                                                                                                                                                                                                                                                                                                                                          |                                                                                    |  | Presence/Percentage Cover (%)                                                                                                                                                                                                                                                                                                       |    |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |  | Q1                                                                                                                                                                                                                                                                                                                                  | Q2 | Q3 | Q4 | Q5 |
| Common Bent                                                                                                                                                                                                                                                                                                                                           | <i>Agrostis capillaris</i>                                                         |  | P                                                                                                                                                                                                                                                                                                                                   | P  |    |    | P  |
| Red Fescue                                                                                                                                                                                                                                                                                                                                            | <i>Festuca rubra</i>                                                               |  | P                                                                                                                                                                                                                                                                                                                                   |    | P  |    |    |

|                                           |                                  |    |    |    |    |    |
|-------------------------------------------|----------------------------------|----|----|----|----|----|
| Cock's-foot                               | <i>Dactylis glomerata</i>        |    | P  | P  |    | P  |
| Perennial Ryegrass                        | <i>Lolium perenne</i>            | 3  | P  | 3  | 5  | 5  |
| Meadow Buttercup                          | <i>Ranunculus acris</i>          |    |    | P  |    |    |
| Yorkshire Fog                             | <i>Holcus lanatus</i>            | P  | P  | P  | P  | P  |
| False Oat-grass                           | <i>Arrhenatherum elatius</i>     |    | P  | P  |    |    |
| Creeping Thistle                          | <i>Cirsium arvense</i>           | P  |    |    |    |    |
| Creeping Buttercup                        | <i>Ranunculus repens</i>         |    |    | 3  |    | 1  |
| Creeping Bent                             | <i>Agrostis stolonifera</i>      | P  | P  | P  | P  | P  |
| Tufted Hairgrass                          | <i>Deschampsia cespitosa</i>     | P  |    |    |    |    |
| Red Clover                                | <i>Trifolium pratense</i>        | P  |    |    |    |    |
| Meadow Vetchling                          | <i>Lathyrus pratensis</i>        |    | P  |    |    |    |
| Blackthorn                                | <i>Prunus spinosa</i>            |    | P  |    |    |    |
| Spear Thistle                             | <i>Cirsium vulgare</i>           |    |    | 2  |    |    |
| White Clover                              | <i>Trifolium repens</i>          |    |    | 1  |    |    |
| Common Mouse-ear                          | <i>Cerastium fontanum</i>        |    |    |    | P  |    |
| Curled Dock                               | <i>Rumex crispus</i>             |    |    |    | 1  | 2  |
| Dandelion                                 | <i>Taraxacum officinale agg.</i> |    |    |    |    | 1  |
| Hairy Sedge                               | <i>Carex hirta</i>               |    |    |    |    |    |
| Silverweed                                | <i>Potentilla anserina</i>       |    |    |    |    |    |
| Ribwort Plantain                          | <i>Plantago lanceolata</i>       |    |    |    |    |    |
| Grasses                                   |                                  | 98 | 90 | 90 | 97 | 90 |
| Forbs                                     |                                  | 2  | 10 | 2  | 1  | 5  |
| Undesirable species                       |                                  | 0  | 0  | 6  | 1  | 2  |
| Bare Ground                               |                                  | 1  | 0  | 0  | 1  | 0  |
| Additional Species recorded in March 2021 |                                  |    |    |    |    |    |
| Rough-stalked Meadow-grass                | <i>Poa trivialis</i>             |    |    |    |    |    |
| Cut-leaved Crane's-bill                   | <i>Geranium dissectum</i>        |    |    |    |    |    |
| Annual Meadow Grass                       | <i>Poa annua</i>                 |    |    |    |    |    |
| Greater Plantain                          | <i>Plantago major</i>            |    |    |    |    |    |
| Tall Fescue                               | <i>Schedonorus arundinaceus</i>  |    |    |    |    |    |
| Common Sorrel                             | <i>Rumex acetosa</i>             |    |    |    |    |    |
| Black Medic                               | <i>Medicago lupulina</i>         |    |    |    |    |    |
| Soft-brome                                | <i>Bromus hordeaceus</i>         |    |    |    |    |    |
| Broad-leaved Dock                         | <i>Rumex obtusifolius</i>        |    |    |    |    |    |
| Common Nettle                             | <i>Urtica dioica</i>             |    |    |    |    |    |
| Meadow Foxtail                            | <i>Alopecurus pratensis</i>      |    |    |    |    |    |
| Crested Dog's-tail                        | <i>Cynosurus cristatus</i>       |    |    |    |    |    |

|              |                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------|
| Field        | CF4                                                                                                           |
| Habitat Type | Bramble Scrub                                                                                                 |
| Photo        |                             |
| Description  | Bramble scrub with sharp interface between scrub and grassland. > 75% cover of Bramble. > 5% cover of nettle. |

## Appendix 3: Proposed Land Use Plan



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- KEY**
- Site Boundary
  - Site Allocation H2.2
  - Castlewood Ventures Land
  - Vistry Group Land
  - Natural Green Space (5.11 ha)
  - Recreation Space (0.17 ha)
  - Play Space/Nature Play (0.01 ha)
  - Residential Development (2.56ha)
  - Sustainable Urban Drainage (0.28 ha)
  - Formal Paths (0.1 ha)
  - Highways (0.1 ha)
  - Pumping Station (0.01 ha)
  - Small Urban Trees (59 total)
  - Medium Urban Trees (12 total)

NOTE: POS requirements based on Rural Analysis Areas - Wiltshire Open Space Study 2015 - 2026

As part of the open space strategy, offsite contributions will be provided for formal play space.

**CLIENT**  
Castlewood Property Ventures

**PROJECT**  
Land south of White Horse Business Park  
Trowbridge

**DRAWING**  
Land Use with POS strategy  
Castlewood Land

**PROJECT NUMBER**  
CASR3002

|                       |                   |
|-----------------------|-------------------|
| <b>DRAWING NUMBER</b> | <b>CHECKED BY</b> |
| SK3601                | JB                |

|                 |               |
|-----------------|---------------|
| <b>REVISION</b> | <b>STATUS</b> |
| F               | FINAL         |

|             |              |
|-------------|--------------|
| <b>DATE</b> | <b>SCALE</b> |
| 13/01/2022  | 1:1,500 @ A3 |

#### Appendix 4: Metric – Headline Results

|                                                                                                                                  |                            |                        |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------|
| Headline Results                                                                                                                 |                            | Return to results menu |
| On-site baseline                                                                                                                 | Habitat units              | 57.32                  |
|                                                                                                                                  | Hedgerow units             | 0.00                   |
|                                                                                                                                  | River units                | 0.00                   |
| On-site post-intervention<br>(Including habitat retention, creation & enhancement)                                               | Habitat units              | 58.81                  |
|                                                                                                                                  | Hedgerow units             | 0.00                   |
|                                                                                                                                  | River units                | 0.00                   |
| On-site net % change<br>(Including habitat retention, creation & enhancement)                                                    | Habitat units              | 2.61%                  |
|                                                                                                                                  | Hedgerow units             | 0.00%                  |
|                                                                                                                                  | River units                | 0.00%                  |
| Off-site baseline                                                                                                                | Habitat units              | 0.00                   |
|                                                                                                                                  | Hedgerow units             | 0.00                   |
|                                                                                                                                  | River units                | 0.00                   |
| Off-site post-intervention<br>(Including habitat retention, creation & enhancement)                                              | Habitat units              | 0.00                   |
|                                                                                                                                  | Hedgerow units             | 0.00                   |
|                                                                                                                                  | River units                | 0.00                   |
| Total net unit change<br>(including all on-site & off-site habitat retention, creation & enhancement)                            | Habitat units              | 1.50                   |
|                                                                                                                                  | Hedgerow units             | 0.00                   |
|                                                                                                                                  | River units                | 0.00                   |
| Total on-site net % change plus off-site surplus<br>(including all on-site & off-site habitat retention, creation & enhancement) | Habitat units              | 2.61%                  |
|                                                                                                                                  | Hedgerow units             | 0.00%                  |
|                                                                                                                                  | River units                | 0.00%                  |
| Trading rules Satisfied?                                                                                                         | No – Check Trading Summary |                        |

Metric – Trading Summary

| Medium Distinctiveness                                                                                         |                         |                           |                            |                                |                                    |
|----------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------|----------------------------|--------------------------------|------------------------------------|
| Habitat Group                                                                                                  | Group                   | On site<br>unit<br>change | Off Site<br>Unit<br>Change | Project<br>wide unit<br>change | Cumulative Broad Habitat<br>Change |
| Cropland - Arable field margins cultivated annually                                                            | Cropland                | 0.00                      | 0.00                       | 0.00                           | 0.00                               |
| Cropland - Arable field margins game bird mix                                                                  | Cropland                | 0.00                      | 0.00                       | 0.00                           |                                    |
| Cropland - Arable field margins pollen & nectar                                                                | Cropland                | 0.00                      | 0.00                       | 0.00                           |                                    |
| Cropland - Arable field margins tussocky                                                                       | Cropland                | 0.00                      | 0.00                       | 0.00                           |                                    |
| Cropland - Cereal crops winter stubble                                                                         | Cropland                | 0.00                      | 0.00                       | 0.00                           |                                    |
| Grassland - Other lowland acid grassland                                                                       | Grassland               | 0.00                      | 0.00                       | 0.00                           | -1.01                              |
| Grassland - Other neutral grassland                                                                            | Grassland               | -1.01                     | 0.00                       | -1.01                          |                                    |
| Grassland - Upland acid grassland                                                                              | Grassland               | 0.00                      | 0.00                       | 0.00                           |                                    |
| Heathland and shrub - Blackthorn scrub                                                                         | Heathland and shrub     | 0.00                      | 0.00                       | 0.00                           | 0.27                               |
| Heathland and shrub - Bramble scrub                                                                            | Heathland and shrub     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Heathland and shrub - Gorse scrub                                                                              | Heathland and shrub     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Heathland and shrub - Hawthorn scrub                                                                           | Heathland and shrub     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Heathland and shrub - Hazel scrub                                                                              | Heathland and shrub     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Heathland and shrub - Mixed scrub                                                                              | Heathland and shrub     | 0.27                      | 0.00                       | 0.27                           |                                    |
| Lakes - Ponds (Non- Priority Habitat)                                                                          | Lakes                   | 0.00                      | 0.00                       | 0.00                           | 0.00                               |
| Lakes - Reservoirs                                                                                             | Lakes                   | 0.00                      | 0.00                       | 0.00                           |                                    |
| Sparsely vegetated land - Other inland rock and scree                                                          | Sparsely vegetated land | 0.00                      | 0.00                       | 0.00                           | 0.00                               |
| Urban - Brown roof                                                                                             | Urban                   | 0.00                      | 0.00                       | 0.00                           | 0.00                               |
| Urban - Cemeteries and churchyards                                                                             | Urban                   | 0.00                      | 0.00                       | 0.00                           |                                    |
| Urban - Intensive green roof                                                                                   | Urban                   | 0.00                      | 0.00                       | 0.00                           |                                    |
| Woodland and forest - Other Scot's Pine woodland                                                               | Woodland and forest     | 0.00                      | 0.00                       | 0.00                           | 0.00                               |
| Woodland and forest - Other woodland; broadleaved                                                              | Woodland and forest     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Woodland and forest - Other woodland; mixed                                                                    | Woodland and forest     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Intertidal sediment - Littoral coarse sediment                                                                 | Intertidal sediment     | 0.00                      | 0.00                       | 0.00                           | 0.00                               |
| Intertidal sediment - Littoral sand                                                                            | Intertidal sediment     | 0.00                      | 0.00                       | 0.00                           |                                    |
| Intertidal Hard Structures - Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI) | Intertidal              | 0.00                      | 0.00                       | 0.00                           |                                    |
|                                                                                                                |                         | -0.75                     | 0.00                       | -0.75                          |                                    |

Metric – Habitat Baseline

| A-1 Site Habitat Baseline |                     |                         |                 |                      |       |           |       |                                                   |                             |                                   |                                                                 |                     |
|---------------------------|---------------------|-------------------------|-----------------|----------------------|-------|-----------|-------|---------------------------------------------------|-----------------------------|-----------------------------------|-----------------------------------------------------------------|---------------------|
| Condense / Show Columns   |                     |                         |                 | Condense / Show Rows |       |           |       |                                                   |                             |                                   |                                                                 |                     |
| Main Menu                 |                     |                         |                 | Instructions         |       |           |       |                                                   |                             |                                   |                                                                 |                     |
|                           | Habitats and areas  |                         |                 | Distinctiveness      |       | Condition |       | Strategic significance                            |                             |                                   | Suggested action to address habitat losses                      | Ecological baseline |
| Ref                       | Broad habitat       | Habitat type            | Area (hectares) | Distinctiveness      | Score | Condition | Score | Strategic significance                            | Strategic significance      | Strategic Significance multiplier |                                                                 | Total habitat units |
| 1                         | Grassland           | Other neutral grassland | 4.09            | Medium               | 4     | Moderate  | 2     | Within area formally identified in local strategy | High strategic significance | 1.15                              | Same broad habitat or a higher distinctiveness habitat required | 37.63               |
| 2                         | Grassland           | Other neutral grassland | 4.21            | Medium               | 4     | Poor      | 1     | Within area formally identified in local strategy | High strategic significance | 1.15                              | Same broad habitat or a higher distinctiveness habitat required | 19.37               |
| 3                         | Heathland and shrub | Mixed scrub             | 0.07            | Medium               | 4     | Poor      | 1     | Within area formally identified in local strategy | High strategic significance | 1.15                              | Same broad habitat or a higher distinctiveness habitat required | 0.32                |
| 4                         |                     |                         |                 |                      |       |           |       |                                                   |                             |                                   |                                                                 |                     |
| 5                         |                     |                         | 8.37            |                      |       |           |       |                                                   |                             |                                   |                                                                 | 57.32               |

| Ecological baseline | Retention category biodiversity value |               |               |                         |                         |           | Bespoke compensation agreed for unacceptable losses | Assessor comments     |
|---------------------|---------------------------------------|---------------|---------------|-------------------------|-------------------------|-----------|-----------------------------------------------------|-----------------------|
|                     | Total habitat units                   | Area retained | Area enhanced | Baseline units retained | Baseline units enhanced | Area lost | Units lost                                          |                       |
|                     | 37.63                                 |               | 1.84          | 0.00                    | 16.93                   | 2.25      | 20.70                                               | Fields CF1 & CF4      |
|                     | 19.37                                 |               | 2.93          | 0.00                    | 13.48                   | 1.28      | 5.89                                                | Fields CF2, CF3 & CF5 |
|                     | 0.32                                  |               | 0.07          | 0.00                    | 0.32                    | 0.00      | 0.00                                                |                       |
|                     |                                       |               |               |                         |                         |           |                                                     |                       |
|                     | 57.32                                 | 0.00          | 4.84          | 0.00                    | 30.73                   | 3.53      | 26.59                                               |                       |

## Metric – Habitat Creation

| A-2 Site Habitat Creation |                                          |                 |                      |       |             |       |                                                            |                               |                               |                                         |               |  |
|---------------------------|------------------------------------------|-----------------|----------------------|-------|-------------|-------|------------------------------------------------------------|-------------------------------|-------------------------------|-----------------------------------------|---------------|--|
| Condense / Show Columns   |                                          |                 | Condense / Show Rows |       |             |       |                                                            |                               |                               |                                         |               |  |
| Main Menu                 |                                          |                 | Instructions         |       |             |       |                                                            |                               |                               |                                         |               |  |
| Broad Habitat             | Proposed habitat                         | Area (hectares) | Distinctiveness      |       | Condition   |       | Strategic significance                                     |                               |                               | Post development                        |               |  |
|                           |                                          |                 | Distinctiveness      | Score | Condition   | Score | Strategic significance                                     | Strategic significance        | Strategic position multiplier | Standard time to target condition/years | Habitat in as |  |
| Urban                     | Developed land; sealed surface           | 1.79            | V.Low                | 0     | N/A - Other | 0     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 0                                       |               |  |
| Urban                     | Vegetated garden                         | 0.77            | Low                  | 2     | Poor        | 1     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 1                                       |               |  |
| Grassland                 | Modified grassland                       | 0.17            | Low                  | 2     | Poor        | 1     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 1                                       |               |  |
| Urban                     | Urban Tree                               | 0.07            | Medium               | 4     | Moderate    | 2     | Location ecologically desirable but not in local strategy  | Medium strategic significance | 1.1                           | 27                                      |               |  |
| Grassland                 | Other neutral grassland                  | 0.5             | Medium               | 4     | Moderate    | 2     | Within area formally identified in local strategy          | High strategic significance   | 1.15                          | 5                                       |               |  |
| Urban                     | Developed land; sealed surface           | 0.01            | V.Low                | 0     | N/A - Other | 0     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 0                                       |               |  |
| Grassland                 | Modified grassland                       | 0.1             | Low                  | 2     | Poor        | 1     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 1                                       |               |  |
| Urban                     | Developed land; sealed surface           | 0.1             | V.Low                | 0     | N/A - Other | 0     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 0                                       |               |  |
| Urban                     | Allotments                               |                 | Low                  | 2     | Moderate    | 2     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 1                                       |               |  |
| Urban                     | Artificial unvegetated, unsealed surface | 0.08            | V.Low                | 0     | N/A - Other | 0     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 0                                       |               |  |
| Urban                     | Developed land; sealed surface           | 0.01            | V.Low                | 0     | N/A - Other | 0     | Area/compensation not in local strategy/ no local strategy | Low Strategic Significance    | 1                             | 0                                       |               |  |
| Total area                |                                          | 3.53            |                      |       |             |       |                                                            |                               |                               |                                         |               |  |

| Post development/ post intervention habitats |                                  |                                          |                                               |                                      |                                 |                                 |                               |                              |                               |                         |                                                    |  |
|----------------------------------------------|----------------------------------|------------------------------------------|-----------------------------------------------|--------------------------------------|---------------------------------|---------------------------------|-------------------------------|------------------------------|-------------------------------|-------------------------|----------------------------------------------------|--|
| Standard time to target condition/years      | Habitat created in advance/years | Delay in starting habitat creation/years | Temporal multiplier                           |                                      |                                 | Difficulty multipliers          |                               |                              |                               | Habitat units delivered | Assessor comments                                  |  |
|                                              |                                  |                                          | Standard or adjusted time to target condition | Final time to target condition/years | Final time to target multiplier | Standard difficulty of creation | Applied difficulty multiplier | Final difficulty of creation | Difficulty multiplier applied |                         |                                                    |  |
| 0                                            |                                  |                                          | Standard time to target condition applied     | 0                                    | 1.000                           | Low                             | Standard difficulty applied   | Medium                       | 0.67                          | 0.00                    | Built Dev - 70% hardstanding                       |  |
| 1                                            |                                  |                                          | Standard time to target condition applied     | 1                                    | 0.965                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 1.49                    | Built Dev - 30% garden/amenity grassland           |  |
| 1                                            |                                  |                                          | Standard time to target condition applied     | 1                                    | 0.965                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 0.33                    | POS - Formal                                       |  |
| 27                                           |                                  |                                          | Standard time to target condition applied     | 27                                   | 0.382                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 0.24                    | Street trees within built development & formal POS |  |
| 5                                            |                                  |                                          | Standard time to target condition applied     | 5                                    | 0.837                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 3.85                    | SUDS - managed as moderate diversity grassland     |  |
| 0                                            |                                  |                                          | Standard time to target condition applied     | 0                                    | 1.000                           | Low                             | Standard difficulty applied   | Medium                       | 0.67                          | 0.00                    | Play Space/ Nature Play                            |  |
| 1                                            |                                  |                                          | Standard time to target condition applied     | 1                                    | 0.965                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 0.19                    | Allowance for mown grassland footpaths             |  |
| 0                                            |                                  |                                          | Standard time to target condition applied     | 0                                    | 1.000                           | Low                             | Standard difficulty applied   | Medium                       | 0.67                          | 0.00                    | Formal paths (hardstanding)                        |  |
| 1                                            |                                  |                                          | Standard time to target condition applied     | 1                                    | 0.965                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 0.00                    | Allotments                                         |  |
| 0                                            |                                  |                                          | Standard time to target condition applied     | 0                                    | 1.000                           | Low                             | Standard difficulty applied   | Low                          | 1                             | 0.00                    | Highways                                           |  |
| 0                                            |                                  |                                          | Standard time to target condition applied     | 0                                    | 1.000                           | Low                             | Standard difficulty applied   | Medium                       | 0.67                          | 0.00                    | Pumping station                                    |  |
| Total Units                                  |                                  |                                          |                                               |                                      |                                 |                                 |                               |                              |                               | 6.09                    |                                                    |  |

### A-3 Site Habitat Enhancement

Condense / Show Rows

### Instructions

| Post development/ post intervention habitats           |                         |                                         |                  |                  |                 |       |           |       |                                                   |                             |                      |                                        |
|--------------------------------------------------------|-------------------------|-----------------------------------------|------------------|------------------|-----------------|-------|-----------|-------|---------------------------------------------------|-----------------------------|----------------------|----------------------------------------|
| Proposed Habitat (Pre-Populated but can be overridden) |                         | Change in distinctiveness and condition |                  | Area (hectares ) | Distinctiveness | Score | Condition | Score | Strategic significance                            |                             |                      | Standard time to target condition/year |
| Proposed Broad Habitat                                 | Proposed habitat        | Distinctiveness change                  | Condition change |                  |                 |       |           |       | Strategic significance                            | Strategic position          | Strategic multiplier |                                        |
| Grassland                                              | Other neutral grassland | Medium - Medium                         | Moderate - Good  | 1.84             | Medium          | 4     | Good      | 3     | Within area formally identified in local strategy | High strategic significance | 1.15                 | 10                                     |
| Grassland                                              | Other neutral grassland | Medium - Medium                         | Poor - Good      | 2.93             | Medium          | 4     | Good      | 3     | Within area formally identified in local strategy | High strategic significance | 1.15                 | 15                                     |
| Heathland and shrub                                    | Mixed scrub             | Medium - Medium                         | Poor - Moderate  | 0.07             | Medium          | 4     | Moderate  | 2     | Within area formally identified in local strategy | High strategic significance | 1.15                 | 5                                      |

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## NICHOLAS PEARSON ASSOCIATES

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ENVIRONMENTAL DESIGN | LANDSCAPE ARCHITECTURE | ECOLOGY | VISUALISATION

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